

Release Notes SIP Application SoundPoint® and SoundStation® IP

Version 2.2.2 2 December 2007

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Release Notes - SIP Application

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1. General

These release notes apply to version 2.2.2 of the SoundPoint IP SIP application.

This release is a patch release that replaces the 2.2.0 release as the latest generally available (GA) release.

For more information, refer to the documents listed in Section 4.

1.1 Important Notes

- This software release does not include images for the SoundPoint IP 300 and 500 phone models. If deployments utilize a mix of IP 300 and IP 500 phones along with newer models the steps detailed in technical bulletin 35311 must be followed. The technical bulletin is available from www.polycom.com/support/voip (Search the Knowledge Base for 35311).
- Support for encrypted media using SRTP is available in this release. Due to the
 significant inter-operability needs when deploying SRTP, this feature is available
 when the phones are used with particular call servers and network infra-structure
 only. Please contact your solutions provider to establish whether they offer this
 feature. Anyone wishing to use this feature for inter-operability testing should contact
 Polycom to receive technical bulletin 25751 for details on how to enable this feature.
- This is the first GA release to support the SoundPoint IP 560 product platform.

1.2 System Requirements

Platform	BootROM version
SoundPoint IP 301	2.6.1 or greater
SoundPoint IP 320	3.2.3RevB or greater
SoundPoint IP 330	3.2.3RevB or greater
SoundPoint IP 430	3.1.3 or greater
SoundPoint IP 501	2.6.1 or greater
SoundPoint IP 550	3.2.3 or greater
SoundPoint IP 560	4.0.1 or greater
SoundPoint IP 600	2.6.1 or greater
SoundPoint IP 601	3.1.0 or greater
SoundPoint IP 650	3.2.2RevB or greater
SoundStation IP 4000	3.1.2 or greater

1.3 Distribution Files

The following files constitute the 2.2.2 distribution of the SoundPoint / SoundStation IP SIP application. For centrally provisioned systems, copy these files to the boot server, maintaining the folder hierarchy present in the zip file.

Some of the configuration files must be modified. Refer to the *Administrator Guide* for details.

Files	Description	
sip.ld	Concatenated SIP application executable, Version	
	2.2.2.0084 for all platforms	
2345-11300-010.sip.ld	SIP application executable for SoundPoint IP 301 – Version 2.2.2.0084	
2345-12200-002.sip.ld	SIP application executables for SoundPoint IP 320 – Version 2.2.2.0084	
2345-12200-005.sip.ld		
2345-12200-001.sip.ld	SIP application executables for SoundPoint IP 330 – Version 2.2.2.0084	
2345-12200-004.sip.ld		
2345-11402-001.sip.ld	SIP application executable for SoundPoint IP 430 – Version 2.2.2.0084	
2345-11500-030.sip.ld	SIP application executables for SoundPoint IP 501 – Version 2.2.2.0084	
2345-11500-040.sip.ld		
2345-12500-001.sip.ld	SIP application executable for SoundPoint IP 550 – Version 2.2.2.0084	
2345-12560-001.sip.ld	SIP application executable for SoundPoint IP 560 – Version 2.2.2.0084	
2345-11600-001.sip.ld	SIP application executable for SoundPoint IP 600 – Version 2.2.2.0084	
2345-11605-001.sip.ld	SIP application executable for SoundPoint IP 601 – Version 2.2.2.0084	
2345-12600-001.sip.ld	SIP application executable for SoundPoint IP 650 – Version 2.2.2.0084	
2201-06642-001.sip.ld	SIP application executable for SoundStationt IP 4000 – Version 2.2.2.0084	
sip.cfg	main core and SIP configuration file	
phone1.cfg	example per-phone SIP configuration	
sip.ver	Text file detailing build-id(s) for the release.	
000000000000.cfg	example master configuration file	
000000000000-directory~.xml	example per-phone local contact directory XML file (edit and then remove '~' from name to seed phones which have no directory)	
SoundPointIP-dictionary.xml	dictionary files for multilingual support include (no IP 30X support): Chinese, China (for IP 6XX, IP 550, 560 and IP 4000 only) Danish, Denmark Dutch, Netherlands English, Canada English, United Kingdom English, United States French, France German, Germany Italian, Italy Japanese, Japan (for IP 6XX, IP 550 and IP 4000 only) Korean, Korea (for IP 6XX, IP 550 and IP 4000 only) Norwegian, Norway Portuguese, Portugal Russian, Russia Spanish, Spain Swedish, Sweden	
SoundPointIPWelcome.wav	start up welcome sound effect	

2. Changes

2.1 Version 2.2.2

2.1.1 Added or Changed Features

- 35534: De-couple Presence Signaling from Idle Screen Soft-key UI
- 36931: Add support for SoundPoint IP 560 product.
- 37053: Add ability to make local contact directory read-only from the phone
- 38328: Add check for local contact directory changes during configuration change checks
- 38357: Add ability to adjust the maximum brightness of the SoundPoint IP 550 and 650 phones.
- 38371: Allow for TCP keep-alive on SIP signaling TLS connections
- 38654: Add support for SoundPoint IP 320 Part Number 2345-12200-005 and SoundPoint IP 330 Part Number 2345-12200-004 for China market.
- 38888: Add ability to adjust the maximum brightness of SoundPoint IP Backlit Expansion Modules.

2.1.2 Removed Features

• 38813: Remove 1000 half duplex as a valid ethernet configuration.

2.1.3 Corrections

- 34800: MWI Notify: Message Waiting Counts are ignored if "Messages-Waiting" is set to "no"
- 35692: Functionality breaks down on pressing "conference>>cancel" soft keys after transfer try is rejected. Phone reboots.
- 36566: Microbrowser: Left arrow when on first field in a form makes cursor turn invisible
- 36786: Changing audio modes (e.g. handsfree to handset) during call set-up mode may not work correctly in some circumstances.
- 37284: During a Blind Transfer the phone should terminate the call on receipt of a 180 Ringing Response.
- 37313: RTP packet size incorrect when SRTP authentication turned off
- 37316: Authentication failing when phones have different payload size
- 37334: Disabling CDP from the phone menu causes an unnecessary reboot
- 37709: SoundPoint IP 330/320 phones using the idle micro-browser may reboot after several days due to low memory.
- 38112: Logging message indicates that default cert bundle in use when custom only has been selected.

- 38344: If URL-dialing is disabled in the configuration file, the phone shows Number@ServerIP for caller ID (This issue occurs on SIP 2.2.0 and SIP 2.2.1 releases only).
- 38430: In a BLA configuration attempting to make a call on a remotely busy shared line may cause the phone to re-boot instead of displaying "Service Unavailable". Occurs on SoundPoint IP 330/320, 430, 550, 650 phones.
- 38435: When the phone's local directory is writable, unable to add a new contact by selecting "new entry" on SoundPoint IP 330/320 phones.
- 38666: If a call is initiated in hands-free mode and the Ringback Tone is server generated the far-end user may experience echo when they answer the call. If the originating phone is switched to handset mode and back to hands-free mode the echo goes away. Occurs on SoundPoint IP 330/320, 430, 550, 650 phones.
- 38678: In a particular network configuration when using BLA the bridged line indication does not light up properly due to a missing NOTIFY from the phone.

2.1.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	tcplpApp.keepalive.tcp. idleTransmitInterval	Sets the interval of the TCP keepalive packets.
sip	added	tcplpApp.keepalive.tcp. noResponseTrasmitInterval	Set the retransmission interval when the server fails to acknowledge the TCP keep-alive.
sip	added	tcplpApp.keepalive.tcp.sip.tls. enable	Enables sending a TCP keep-alive packet from the phone to the server. The server is expected to respond with a TCP keep-alive ack. This is only used with TLS sessions.
sip	added	dir.local.readonly	When set to "1", the contact directory cannot be changed and [MACADDRESS]-directory.xml is not uploaded.
sip	added	pres.idleSoftKeys	If set to "0", appearance of presence idle soft keys is disabled.

2.2 Version 2.2.1 (Limited Release)

2.2.1 Added or Changed Features

 38371: When SIP over TLS is configured the phone will send TCP Keep-Alive messages to the SIP server every 30 seconds, and will retry 3 times (at 20 seconds) before resetting (RST) the connection if no response is received

2.2.2 Removed Features

None.

2.2.3 Corrections

- 36557: When SRTP is enabled and "so" logging level is set to 1, the RTCP sender report displays encrypted values in the log file
- 37651: RTP Timestamp not updated correctly for silence packets
- 37690: Phone does not retry ACK when receiving duplicate 200 OK
- 37708: Phones fail SIP TLS registration when SNTP server is not configured
- 37851: SRTP phone doesn't include Crypto Suite in Group Pickup signaling
- 37873: Crypto line in answer does not have correct tag field
- 37878: Multiple crypto suites not handled when there is a re-INVITE
- 37879: SRTCP packets have invalid authentication tags
- 37968: Phone with multiple lines using TLS not re-registering on loss of connection
- 38110: Far end hears noise when an SRTP call is taken off hold with some SIP servers
- 38249: SRTP lifetime value cannot be parsed correctly by the called party
- 38384: During a local SRTP conference, a far end holding then resuming may result in one-way audio or noise with some SIP servers

2.2.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	sec.srtp.offer.HMAC_SHA1_80	If set to 1 or Null, a crypto line with the AES_CM_128_HMAC_SHA1_80 crypto-suite will be included in offered SDP. If set to 0, the crypto line is not included.
sip	added	sec.srtp.offer.HMAC_SHA1_32	If set to 1, a crypto line with the AES_CM_128_HMAC_SHA1_32 crypto-suite will be included in offered SDP. If set to 0 or Null, the crypto line is not included.

2.3 Version 2.2.0

2.3.1 Added or Changed Features

- 22532: When there has been no activity in a menu for a configurable period of time, the phone returns to the idle display. This does not happen if the user is entering data using a menu.
- 25274: Added sending vendor identifier information through DHCP
- 25702: Added microbrowser support for accepting and displaying a URL that points directly to a BMP image (previously it was necessary to embed BMP images in an XHTML document)

- 27040: Added new configurable ring-while-busy options
- 28029: Added microbrowser support for two-dimensional table navigation using all four arrow keys
- 28747: Added a general flash file system caching mechanism so that downloaded resources can be stored in non-volatile memory
- 29030: Added automatic provisioning support for individual image files
- 29854: Added support for tracking of missed calls to be configurable on a perline basis
- 31558: Added synchronization of local DND/CF features with server-based DND/CF features
- 31840: Set transfer time-out for image file download to worst case scenario
- 32259: Added microbrowser support for recognizing mime types
- 32648: Reformatted call list entries
- 33616: Added configuration option for default transfer type for SoundPoint IP
 320 and 330 phones
- 33748: Improved resistance to denial of service attacks aimed at phone's web server
- 34131: Changed URL dialing terminology from "Name" to "URL"
- 34434: Implemented 300Hz high pass transmit filter to reduce low frequency noise (noise creates problems in some network line echo cancellers). This can be enabled or disabled.
- 34573: Added support for re-establishing a TLS connection if the connection closes
- 34625: Added ability to discover provisioning server address using DHCPINFORM
- 34651: Added phone serial number (MAC address) to user-agent string HTTP Gets
- 34685: Renamed "Services" menu entry to "Applications"
- 34705: Added support in microbrowser for form functionality when embedded in tbody or out of tbody
- 34707: Added low-delay handset acoustic echo canceller for SoundPoint IP 320, 330, 430, 550 and 650 phones. This can be enabled or disabled.
- 34874: If all DNS servers are found to be unreachable, the phone suppresses DNS queries for 5 minutes (as per RFC 2308 Sec 7.1)
- 34998: Increased maximum number of registrations on SoundPoint IP 650 phones to 34
- 35039: Pressing "Exit" soft key when using the microbrowser should return user to telephony application

- 35040: Added configurable timeout parameter to allow microbrowser to return to telephony application after a period of inactivity in the microbrowser
- 35043: Added configurable option to display or hide browser status messages in microbrowser
- 35087: Changed boot-up behaviour so that idle browser only starts about 2 minutes after the phone has booted up (this is to optimize memory use)
- 35099: Added support for TLS transport to Syslog
- 35199: Improved some translations in Norwegian XML dictionary file
- 35296: Added support for managing TLS custom certificates via the configuration file system
- 35311: Added support for specifying different versions of the application executable and configuration files in the < Ethernet address>.cfg file on the boot server
- 35372: Pressing the "Exit" function key on the SoundStation IP 4000 phone when using the microbrowser should return user to telephony application
- 35373: Changed appearance of soft keys when running microbrowser so that they look the same as when running the telephony application
- 35419: Added user interface for configuring no-answer and busy forwarding behavior
- 35481: Added support for Backlit Expansion Module
- 35507: Adding configuration parameter to control the timeout back to the idle display after a period of inactivity in a menu
- 36030: Implemented Ethernet ingress filtering for DoS suppression and VLAN filtering
- 36277: Added ability to delete the contact number entered in the Forward menu
- 36531: Updated all translation dictionary files to rename "Services" menu entry to "Applications"

2.3.2 Removed Features

• 36079: Removed support for the SoundPoint IP 300 and 500 phones

2.3.3 Corrections

- 24021: Call display gets corrupted in IP-dialed call if caller presses a digit then puts call on hold
- 25744: Spaces go missing in text in microbrowser occasionally
- 26110: Volume level cannot be changed in audio diagnostics mode
- 26231: ACD login failure should cause busy tone to be played

- 26389: Forward contact which has been disabled is not displayed after a reboot
- 26935: ACD icon not suppressed if feature is disabled in sip.cfg but activated in phone1.cfg
- 27105: The idle browser occasionally displays when the menu is being updated
- 27958: Phone hears busy tone for 2 seconds after far end hangs up and another call is already in the incoming state and has triggered the call waiting alert
- 28419: Divert settings for lines 7 to 12 are not used
- 28503: When in the "held" state, a shared line hears ring tone instead of call waiting tone when another call comes in
- 28570: Stuttered dial tone (indicating voice mail waiting) does not work on shared line
- 28622: Some UNICODE ranges are not properly mapped
- 28681: "Forward" is not removed from menu when function disabled
- 29014: Cannot edit the local directory on the phone if the file is corrupt on the server
- 29358: Phone may crash if the specified DNS server is down and an invalid SNTP address is configured
- 29470: Cursor is in wrong position when performing a factory reset on the SoundPoint IP 301 phone
- 29573: Phone may freeze if a DNS server address is all zeroes
- 29966: Phone may reboot if incorrect information is entered in the menu for custom CA certificate
- 30880: Phone may crash when editing a server address which is 255 characters long
- 30902: Auto reject or divert settings changed in a contact after entering contact directory by pressing and holding a speed dial line key are not correctly displayed when next pressing and holding that speed dial line key
- 31019: There is no confirmation pop-up message after choosing to reset the local security key
- 31326: Transferring a call to windows messenger or office communicator may leave the phone in a frozen state
- 31886: Remote resume does not work on BLA line when call between two other phones sharing the same line has been put on hold
- 31994: Trying to delete a null unicode character in the contact list causes the phone to crash

- 32179: When SAS-VP provisioning is used, the boot server password is visible in the application log file
- 32816: Phone may crash on subsequent call if using NTLM and received transfer from a non-NTLM phone
- 33105: "Hold" does not work if selected just before a Conference is completed
- 33748: Web server has vulnerability to DOS attacks
- 33931: Not all keys on phone can be remapped to Null
- 34089: SoundPoint IP 430 phone keeps rebooting if a function key is remapped to null in the configuration files
- 34196: Phone keeps rebooting when SIP server address is not a fully qualified domain name and primary DNS server replies to queries with ICMP destination unreachable packets (due to service being turned off) and secondary DNS server is not configured with NAPTR and SRV entries for the SIP server
- 34237: Default directory file (00000000000-directory.xml) is not downloaded by the phone when the *Ethernet-address*—directory.xml file does not exist on the boot server
- 34258: Log file is deleted when it reaches the configured size limit even though log.render.file.upload.append.limitMode is set to "stop"
- 34271: SoundPoint IP 430/550/650 phones may reboot when microbrowser XHTML page contains combined FORM and TABLE elements
- 34460: Local directory file larger than 10kB is downloaded by phone once but on subsequent reboots the phone freezes
- 34578: Phones may crash when downloading a directory file which contains an empty contact field
- 34636: Call on a shared line may lose audio when cancelling a transfer after the far end has already cancelled a transfer or conference
- 34641: Emergency Call Routing does not work correctly if multiple numbers are configured in a single entry in the configuration file e.g. dialplan.1.routing.emergency.1.value=911,9911
- 34649: First call after a reboot may demonstrate one-way audio if phones have different codec preferences and volpProt.SDP.answer.useLocalPreferences parameter is set to default
- 34891: SoundStation IP 4000 loudness does not decrease for bottom six volume settings
- 35320: If two function keys are remapped to dial specific speed dial numbers, only the first one will work
- 35480: SoundPoint IP 320 and 330 phones allow watching only 7 buddies instead of 8 and may crash when an 8th watched buddy is added

- 35490: SoundPoint IP 320 and 330 phones do not display SAS-VP failure messages during boot-up
- 36031: If a phone is configured to use TLS for the 2nd line and TCP for the 1st, the 2nd line does not register
- 36107: SoundStation IP 4000 phone drops maximum size packets when VLAN is enabled
- 36477: Configuring the nat.signalPort parameter may cause the phone to crash
- 36775: Route-Set susceptible to change mid-dialog in certain situations
- 36882: Selecting a speed dial number using the 'nn#' key sequence does not work on SoundPoint IP 320 and 330 phones when the phone is unregistered or is using URL dialing mode
- 36905: CDP packet always advertises LAN duplex mode as "Duplex: Full"
- 36948: On SoundPoint IP 320 and 330 phones, if the Dial and Menu keys are pressed at the same time after entering digits from the idle display, incorrect soft keys are displayed
- 36967: If the phone receives an INVITE with SDP which contains video information, it returns a malformed response
- 37086: Phone ignores expiration date of CA certificate if SNTP is only set via DHCP
- 37632: Out of order SCA signaling can lead to improper handling of Shared Lines in some situations.
- 37646: DNS SRV querying after A record cache makes registration fail

2.3.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	volpProt.SIP.csta	Not currently used, will be used in a future release.
sip	added	volpProt.SIP.serverFeatureControl.d nd	See Administrator's Guide for SIP 2.2.0 for details
sip	added	volpProt.SIP.serverFeatureControl.c f	See Administrator's Guide for SIP 2.2.0 for details
sip	added	up.toneControl.bass	Not currently used, will be used in a future release.
sip	added	up.toneControl.treble	Not currently used, will be used in a future release.
sip	added	up.audioSetup.auxInput	Not currently used, will be used in a future release.
sip	added	up.audioSetup.auxOutput	Not currently used, will be used in a future release.
sip	added	up.idleTimeout	See Administrator's Guide for SIP 2.2.0 for details
sip	added	se.pat.ringer.12.inst.5.type="branch" se.pat.ringer.12.inst.5.value="-4"	
sip	added	voice.txPacketFilter	See Administrator's Guide for SIP 2.2.0 for details

.cfg File	Action	Parameter	Description
sip	added	voice.codecPref.IP_7000.xxx	Not currently used, will be used in a future release.
sip	added	voice.audioProfile.Lin16.frequency voice.audioProfile.G7221.xxx voice.audioProfile.G7221C.xxx voice.audioProfile.Siren14.xxx voice.audioProfile.Siren22.xxx	Not currently used, will be used in a future release.
sip	added	Several gain and other voice parameters have been added.	The entire gain section in sip.cfg must be updated. Failure to do this will affect the audio performance of the phone.
sip	added	voice.rxEq.hf.IP_7000.xxx voice.txEq.hf.IP_7000	Not currently used, will be used in a future release.
sip	added	call.dialtoneTimeOut	See Administrator's Guide for SIP 2.2.0 for details
sip	added	call.disableAutoResumeCentralConf erence	Not currently used, will be used in a future release.
sip	added	call.singleKeyPressConference	Not currently used, will be used in a future release.
sip	added	call.transfer.blindPreferred	See Administrator's Guide for SIP 2.2.0 for details
Sip	added	call.cellPhoneAutoBridging	Not currently used, will be used in a future release.
Sip	added	bitmap.IP_7000.xxx	Not currently used, will be used in a future release.
Sip	added	log.level.change.srtp	See Administrator's Guide for SIP 2.2.0 for details
Sip	added	log.level.change.clink log.level.change.pnetm log.level.change.peer	Not currently used, will be used in a future release.

.cfg File	Action	Parameter	Description
Sip	added	sec.srtp.enable	See Technical Bulletin 25751 for
'		sec.srtp.leg.enable	details.
		sec.srtp.offer	
		sec.srtp.require	
		sec.srtp.key.lifetime	
		sec.srtp.mki.enabled	
		sec.srtp.sessionParams.noAuth.offe	
		r	
		sec.srtp.sessionParams.noAuth.req	
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		sec.srtp.sessionParams.noEncrypR TP.offer	
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		sec.srtp.sessionParams.leg.noAuth.r equire	
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		sec.srtp.sessionParams.leg.noEncry pRTP.require	
		sec.srtp.sessionParams.leg.noEncry pRTCP.offer	
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		sec.srtp.sessionParams.IP_4000.no Auth.offer	
		sec.srtp.sessionParams.IP_4000.no Auth.require	
		sec.srtp.sessionParams.IP_4000.no EncrypRTP.offer	
		sec.srtp.sessionParams.IP_4000.no EncrypRTP.require	
		sec.srtp.sessionParams.IP_4000.no EncrypRTCP.offer	
		sec.srtp.sessionParams.IP_4000.no	
		EncrypRTCP.require	
		sec.srtp.leg.allowLocalConf	
sip	added	license.polling.time	See Administrator's Guide for SIP
			2.2.0 for details
sip	added	feature.16.name	Not currently used, will be used in a
		feature.16.enabled	future release.
sip	added	mb.main.idleTimeout	See Administrator's Guide for SIP 2.2.0 for details
sip	added	mb.main.statusbar	See Administrator's Guide for SIP 2.2.0 for details
sip	added	pnet.role	Not currently used, will be used in a future release.

.cfg File	Action	Parameter	Description
sip	changed	tone.chord.ringer.46.offDur="200" to	
		"0" tone.chord.ringer.46.repeat="2" to "1"	
sip	changed	se.pat.ringer.12.inst.1.type="silence" to "chord" se.pat.ringer.12.inst.1.value="100" to "46"	Note: also added se.pat.ringer.12.inst.5.type="branch" and se.pat.ringer.12.inst.5.value="-4"
		se.pat.ringer.12.inst.2.type="chord" to "silence"	
		se.pat.ringer.12.inst.2.value="46" to "200"	
		se.pat.ringer.12.inst.3.type="silence" to "chord"	
		se.pat.ringer.12.inst.3.value="2000" to "46"	
		se.pat.ringer.12.inst.4.type="branch" to "silence"	
		se.pat.ringer.12.inst.4.value="-2" to "2000"	
sip	changed	voice.audioProfile.G722.jitterBufferS hrink="500" to "1500"	Audio performance tuning.
		voice.audioProfile.G722.jitterBufferM ax="160" to "200"	
sip	changed	Several gain and other voice parameters have been changed.	The entire gain section in sip.cfg must be updated. Failure to do this will affect the audio performance of the phone.
sip	changed	voice.rxEq.hd.IP_650.preFilter.enabl e="1" to "0"	Audio performance tuning.
		voice.txEq.hs.IP_650.preFilter.enabl e="1" to "0"	
		voice.txEq.hd.IP_650.preFilter.enabl e="1" to "0"	
		voice.txEq.hf.IP_650.preFilter.enabl e="1" to "0"	
sip	changed	voice.handset.txag.adjust.IP_430="2 4" to "9"	Audio performance tuning.
		voice.handset.sidetone.adjust.IP_43 0="-13" to "0"	
sip	changed	Multiple parameters in the ind.anim.xxx, ind.class.xxx and ind.gi.xxx sections.	The entire indicator section in sip.cfg must be updated. Failure to do this will affect the appearance of the display.
sip	changed	res.finder.minFree="1200" to "600"	
sip	removed	ind.anim.xxx parameters from CTX_CUSTOM1 to CTX_CUSTOM8 and CTX_UNASSIGNED for all platforms	These parameters were not used.
sip	removed	usb.enable usb.bulkDrive.enable usb.bulkDrive.name	These parameters were not used.
phone1	added	reg.x.csta	Not currently used, will be used in a
			future release.

.cfg File	Action	Parameter	Description
phone1	added	reg.x.serverFeatureControl.dnd reg.x.serverFeatureControl.cf	See Administrator's Guide for SIP 2.2.0 for details
phone1	added	call.missedCallTracking.x.enabled	See Administrator's Guide for SIP 2.2.0 for details
phone1	added	call.callWaiting.ring	See Administrator's Guide for SIP 2.2.0 for details
00000000000	added	LICENSE_DIRECTORY	See Administrator's Guide for SIP 2.2.0 for details
00000000000	added	APP_FILE_PATH_SPIP300="sip_21 2.ld" CONFIG_FILES_SPIP300="phone1 _212.cfg, sip_212.cfg"	These are samples of the new fields which can specify application images and configuration files for specific hardware platforms, in this case the SoundPoint IP 300. See Administrator's Guide for SIP 2.2.0 for details
00000000000	added	APP_FILE_PATH_SPIP500="sip_21 2.ld" CONFIG_FILES_SPIP500="phone1 _212.cfg, sip_212.cfg"	These are samples of the new fields which can specify application images and configuration files for specific hardware platforms, in this case the SoundPoint IP 500. See Administrator's Guide for SIP 2.2.0 for details

2.4 Version 2.1.2

2.4.1 Added or Changed Features

- 35361: Added ability for parameters in < Ethernet address>.cfg to be overridden by model- or platform-specific versions
- 35969: Changed behavior of the select button or right arrow button in call lists and contact directory on SoundPoint IP 320 and 330 to give contact information instead of acting the same as the dial key
- 36538: Added configurable failover behavior for authentication signaling to specify that the phone first retries a SIP transaction with the server that has just sent a 401 or 407 response
 - Uses new parameters volpProt.SIP.authOptimizedInFailover and/or reg.x.auth.optimizedInFailover
- 36647: Added configurable option allowing message waiting indicator to be displayed although voicemail cannot be accessed Uses new parameter up.mwiVisible
- 36681: Added logging of version information for configuration files

2.4.2 Removed Features

None.

2.4.3 Corrections

• 34899: Phone may continuously reboot if a configuration change is made then power is disconnected and the provisioning server is unavailable

- 35873: Registration expiry period is limited to 65535 seconds
- 35914: Scheduled logging stops after 99 days
- 35961: Cannot use call/group/directed pickup on SoundPoint IP 320 and 330 phone while a call is incoming or the phone is off hook
- 35974: SoundPoint IP 320 and 330 phones do not show status for watched contacts until after the next report
- 35979: SoundPoint IP 320 and 330 phones reboot while trying to use call pickup on a remote hold BLA call
- 36011: After changing termination while in a local conference, the first time the volume is adjusted the volume slider shows minimum
- 36044: Downloadable character sets are not working correctly in certain scenarios
- 36053: On SoundPoint IP 320 and 330 phones, Add and Delete soft keys should not be available in buddy list if roaming buddy feature is disabled
- 36072: On SoundPoint IP 320 and 330 phones, the digit map is not applied to numbers selected from a call list when in the dial-tone state
- 36074: On SoundPoint IP 320 and 330 phones, the digit map is not correctly applied when using hot dialing from the second line key
- 36225: Phone may reboot if several voicemail NOTIFY messages are received from the server in a short interval
- 36233: Specially crafted Via: header in an INVITE can crash the phone
- 36504: A call is dropped if a blind transfer to an invalid number is attempted
- 36581: SoundPoint IP 320 and 330 phones cannot send #nn codes
- 36753: One phone drops the call when 2nd party attempts another blind transfer to an invalid number
- 36877: All microbrowser text, regardless of which tag is used (except for "href"), is dim on SoundPoint IP 550 and 650 phones

2.4.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	volpProt.SIP.authOptimizedInFail over	This parameter controls failover behavior during authentication signaling. 0 = default behavior which obeys the RFC 1 = optimization enabled, phone first retries a SIP transaction with the server that has just sent a 401 or 407 response

.cfg File	Action	Parameter	Description
sip	added	up.mwiVisible	0 = same behavior as SIP 2.1.1, this is the default behavior 1 = if msg.mwi.x.callBackMode parameter is set to "disabled", message waiting indicator is displayed but voicemail cannot be accessed
sip	changed	Changed file header from \$Revision: \$ \$Date: \$ to \$RCSfile: sip.cfg,v \$ \$Revision: \$	This is required to support the new feature 36681 described above.
phone1	added	reg.x.auth.optimizedInFailover	If this parameter is set, it overrides the global volpProt.SIP.authOptimizedInFailover parameter. x is the registration index. See the description for volpProt.SIP.authOptimizedInFailover
phone1	changed	Changed file header from \$Revision: \$ \$Date: \$ to \$RCSfile: phone1.cfg,v \$ \$Revision: \$	This is required to support the new feature 36681 described above.
00000000000	changed	Changed file header from \$Revision: \$ \$Date: \$ to \$RCSfile: 000000000000.cfg,v \$ \$Revision: \$	This is required to support the new feature 36681 described above.
00000000000- directory~.xml	changed	Changed file header from \$Revision: \$ \$Date: \$ to \$RCSfile: 000000000000-directory~.xml,v \$ \$Revision: \$	This is required to support the new feature 36681 described above.

2.5 Version 2.1.1 C

2.5.1 Added or Changed Features

- 32146: Added support for SoundPoint IP 330
- 33391: Added support for SoundPoint IP 320
- 35415: Added translations for new phrases needed for SoundPoint IP 320 and 330 phones

2.5.2 Removed Features

None.

2.5.3 Corrections

35913: SoundPoint IP430, 550, 650 phones may reboot while in a call under certain network conditions

2.5.4 Configuration File Parameter Changes

None.

2.6 Version 2.1.1

2.6.1 Added or Changed Features

- 33263: Added support for G.729 Annex B SDP signalling per RFC 3555

 Note: New parameter voice.vad.signalAnnexB has been added to support this
- 35268: Added support for 16 levels of gray on the LCD of SoundPoint IP 550 and 650 phones
- 35643: Added support for new SoundPoint IP 320 and 330 phones in the configuration files to allow easier addition of these phones in a future software release

2.6.2 Removed Features

None.

2.6.3 Corrections

- 32273: Failure of call park action results in a dropped call
- 32609: Heavy call volume may cause phone to reject calls due to resource depletion
- 33390, 35392, 35482: Voice activity detection (VAD) comfort noise generation (CNG) packets can be discarded by the jitter buffer or interpreted as out-oforder packets which may result in delayed receive audio when the G.729B codec is in use
- 33586: The To URI is used in a refer-to header instead of the contact URI
 Note: New parameter volpProt.SIP.useContactInReferTo has been added to sip.cfg
 to control the source of the URI used in the refer-to header
- 33647: The phone may reboot because it detects a suspended task even though that task may have been suspended intentionally
- 33967: An error message is logged if a daylight savings time (DST) start or stop time of 0 (12am) is selected (although the selection is correctly used)
- 34325: Microbrowser display is closed when shared line is opened on other phone
- 34431: When changing the configuration of a phone via the web interface, the phone may lock up

- 34443: A remote-on-hold call on a line is not picked up by the first press of the line key with some SIP servers
- 34508: In a G.729 call, SoundPoint IP 50X and 60X phones may reboot with a DSP assertion failure. This problem is more likely in conference calls and can be reliably reproduced within 20 minutes of the call start.
- 34723: RTCP transmission interval is not consistent with industry norms
- 34772: The value of the DLSR field in RTCP sent by the phone can be wrong by up to about one second
- 34827: There are two places to configure the microbrowser from the phone web server
- 34882: The configuration page on the phone web server has two "Event 2" entries in the Global Log Level Limit drop-down list
- 34906: NOTIFY request without dialog content (an 'empty' NOTIFY request, such as you would get with a subscription renewal when the line is idle) does not extinguish LED's lit as a result of previous active dialogs
- 35049: DSP load graph on SoundPoint IP 550 shows slightly incorrect value
- 35228: Phone may have one-way audio when SDP is received with c line below m line
- 35293: Soft keys have some missing pixels on the SoundPoint IP 430 when the microbrowser is accessed
- 35308: A known problem in the SoundPoint IP 430 processor may cause the phone to reboot with a DSP assertion failure instead of restarting the affected driver
- 35477: When handset AEC is enabled on SoundPoint IP 50X and 60X phones, echo may occur on speaker phone when switching between handset and speaker phone
- 35533: The phone's web server shows the DST start and stop days as Monday by default instead of Sunday
- 35537: A saturated transmit signal may cause SoundPoint IP 430 phone to reboot
- 35573: After selecting the Russian language and accessing the microbrowser, the phone may freeze
- 36012: Conference host may indicate phone is muted but audio is heard by far end after one leg ends call

2.6.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	volpProt.SIP.useContactInReferTo	0 = default behavior which is the same as previous behavior, use URI from initial call's To header in REFER's refer-to header 1 = use URI from initial call's Contact header in REFER's refer-to header when setting up a transfer
sip	added	voice.gain.rx.analog.chassis.IP_330 voice.gain.rx.analog.ringer.IP_330 voice.gain.rx.digital.chassis.IP_330 voice.gain.rx.digital.ringer.IP_330 voice.gain.tx.analog.chassis.IP_330 voice.gain.tx.analog.chassis.IP_330 voice.gain.tx.digital.chassis.IP_330 voice.rxEq.hs.IP_330.preFilter.enable voice.rxEq.hs.IP_330.postFilter.enable voice.rxEq.hd.IP_330.postFilter.enable voice.rxEq.hf.IP_330.postFilter.enable voice.txEq.hs.IP_330.postFilter.enable voice.txEq.hs.IP_330.postFilter.enable voice.txEq.hd.IP_330.postFilter.enable voice.txEq.hd.IP_330.postFilter.enable voice.txEq.hd.IP_330.postFilter.enable voice.txEq.hd.IP_330.postFilter.enable voice.txEq.hd.IP_330.postFilter.enable	New parameters to support SoundPoint IP 320 and 330 platforms which will be supported in a future software release. Do not change these values.
sip	added	voice.vad.signalAnnexB	A new line can be added to SDP depending on the setting of this parameter and the voice.vadEnable parameter. Default behavior is the same as voice.vad.signalAnnexB = 0: No change to the SDP voice.vad.signalAnnexB = 1: If voice.vadEnable=1, add attribute line a=fmtp:18 annexb="yes" below a=rtpmap attribute line (where '18' could be replaced by another payload) If voice.vadEnable=0, add attribute line a=fmtp:18 annexb="no" below a=rtpmap attribute line (where '18' could be replaced by another payload)

.cfg File	Action	Parameter	Description
sip	added	voice.handset.rxag.adjust.IP_330 voice.handset.txag.adjust.IP_330 voice.handset.sidetone.adjust.IP_330 voice.headset.rxag.adjust.IP_330 voice.headset.txag.adjust.IP_330 voice.headset.sidetone.adjust.IP_330 dir.search.field font.IP_330.1.name bitmap.IP_330.1.name bitmap.IP_330.66.name ind.idleDisplay.mode ind.anim.IP_330.38.frame.1.bitmap ind.anim.IP_330.38.frame.1.duration ind.gi.IP_330.1.index to ind.gi.IP_330.1.class to ind.gi.IP_330.1.class to ind.gi.IP_330.1.physX to ind.gi.IP_330.1.physX to ind.gi.IP_330.1.physY to ind.gi.IP_330.1.physY to ind.gi.IP_330.1.physY ind.gi.IP_330.1.physW to ind.gi.IP_330.1.physH to ind.gi.IP_330.1.physH to ind.gi.IP_330.1.physH to ind.gi.IP_330.10.physH	New parameters to support SoundPoint IP 320 and 330 platforms which will be supported in a future software release. Do not change these values.

2.7 Version 2.1.0

2.7.1 Added or Changed Features

- 5844: Enhanced support for server fall-back configurations
- 7275: Microbrowser should auto-navigate to first selectable item
- 7444: Added table support to microbrowser
- 8452: Added microbrowser support to the SoundStation IP 4000
- 9268: Added unique prompt for billing code entry
- 9649: Enhanced '+' global prefix character for E.164 user parts in sip: URIs
- 11572: Added ability to strip or insert leading digits for outgoing calls
- 13497: Updated default daylight savings time rules
- 13818: Added ability to disable message waiting indication on a line by line basis
- 13882: Added support for setting RTP streams to inactive when on hold
- 14485: Increased maximum number of digit map segments to 30
- 14733: Improved text entry efficiency in the microbrowser
- 14740: Improved visibility of cursor in text entry fields of microbrowser

- 14759: Added microbrowser support to the SoundPoint IP 501 platform
- 14760: Added microbrowser support to the SoundPoint IP 430 platform
- 14900: Changed line-seize subscription failure handling to be biased towards providing dial tone
- 15934: Added more low end dynamic range to volume control
- 16110: Added support for SoundPoint IP 550 platform
- 16515: Improved "aresDnsLookup: time out on socket select" log message
- 16527: Added a debugging command to display cached DNS NAPTR records
- 17124: Added support for SYSLOG reporting of system status and errors
- 18434: Changed call timer clock display to have no leading colon
- 18966: Added support for adding phone serial number (Ethernet address) to user agent string in HTTP GET's used by microbrowser, and modified format of user agent string used during provisioning process and used by microbrowser

Example showing format of user agent in HTTP GET's previously: User-Agent: Polycom-Microbrowser/1.0 (SIP/2.0.2.0060; SoundPoint IP PolycomSoundPointIP-SPIP_650) libcurl/7.12.1\r\n Example showing format of user agent in HTTP GET's now (with security sec.tagSerialNo set to 1):

User-Agent: Microbrowser/1.1 PolycomSoundPointIP-SPIP_430-UA/2.1.0.2643 (SN:0004f210013a)

- 19111: Added TCPOnly as a transport option
- 19425: Added microbrowser support for form input elements with checked = "true" attribute
- 19443: Added microbrowser support for forms within tables
- 19572: Added configurable sticky line seize behavior only for on-hook dialing

2.7.2 Removed Features

None.

2.7.3 Corrections

- 7301: Phone doesn't ring if one line has Do Not Disturb enabled
- 16354: Inconsistent error message given when attempting to make a call on an unregistered line using different methods when call.enableOnNotRegistered is set to '0'
- 16477: When phone is configured for NAPTR transport but server does not contain NAPTR and SRV, the phone may do SRV lookups for A records or A lookups for SRV records

- 16899: Phone can send a malformed target URI in some NOTIFY messages in certain scenario
- 17179: Transfer may fail in some scenarios if the Transfer softkey is pressed before the second party answers
- 17318: Phone does not update presence status (e.g. to offline) when reboot initiated
- 17422: When using a bridged line, if a call is transferred to an invalid number it cannot be retrieved
- 17614: Setting the phone's own status through "MyStat" does not work properly
- 17868: Boot server password is displayed in Configuration menu if boot server is specified as a full URL including user name and password
- 17911: Per-registration DND does not work on SoundPoint IP 430
- 17918: call.enableOnNotRegistered parameter is not working correctly
- 17920: Incorrect icon displayed for offline status when using peer-to-peer presence
- 18078: When using an LCS server, contacts cannot be added on the phone when the contact list is empty
- 18147: Expansion modules may display solid background if SoundPoint IP 601 or 650 has maximum number of registrations configured and maximum number of roaming buddies enabled
- 18198: Value of reg.x.callsPerLineKey parameter is not taken into account when additional calls are placed using hot (static) dialing
- 18297: VAD/CNG Rx synthesis not working on SoundPoint IP 650
- 18333: Received data on any socket resets timeout of all sockets
- 18393: DTMF levels 3dB lower than configured level when RFC 2833 disabled
- 18501: Incoming call is sent to wrong line in some scenarios when the phone has an active call and reg.x.lineKeys > 1
- 18688: Value of reg.1.callsPerLineKey parameter is not taken into account when two lines are configured and reg.2.callsPerLineKey is set to default and there is a call on hold on both lines
- 18772: SoundPoint IP 650 phone does not show 'HD' animation when a wideband call is transferred to it
- 18773: After a transfer, a SoundPoint IP 650 phone may incorrectly display the 'HD' animation when the call is no longer a wide-band call
- 18785: After receiving a transferred call which is not a wide-band call, a SoundPoint IP 650 phone may incorrectly display the 'HD' animation
- 18985: The log render level for the "sip" module cannot be changed
- 19113: Phone sends incorrect authorization header in some hold scenarios

- 19124: Setting codec preferences using web interface does not work correctly for SoundPoint IP 650
- 19252: Phone does not send a final NOTIFY to initiator of transfer if the phone cancels the transfer before it completes
- 19292: SoundPoint IP 650 phone may freeze after restarting after configuration changed using one of the menus
- 19427: Phone can display "Cache bounced" error message when submitting forms from the microbrowser
- 19524: Problems resuming a call which is on hold on a remote bridged line for a specific SIP server
- 19605: Phone may continue to send INVITE's in specific scenario if a call is initiated then ended but the SIP servers are not reachable
- 19664: Phone may reboot in some scenarios with log file showing a Null pointer in a specific task
- 19702: Receipt of a re-transmitted invalid SIP ACK message may cause phone to reboot
- 19754: Do Not Disturb key cannot be remapped to Null
- 19827: Phone using Bridged Line Appearance can send corrupt message header in SUBSCRIBE message
- 19875: Phone should use NTP time to check validity of SSL server certificate
- 19876: Phone will lose some memory if microbrowser displays "Cache bounced" error message due to unresponsive server
- 19883: Handset sidetone level is 3dB too hot on SoundPoint IP 430
- 35063: Power levels reported via CDP for SoundPoint IP 650 are too low
- 35068: Power levels reported via CDP for SoundPoint IP 601 with EM Power option enabled are too high

2.7.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
phone1	added	reg.x.server.y.lcs	Refer to Technical Bulletin 5844.
phone1	added	dialplan.x.applyToUserSend="1" dialplan.x.applyToUserDial="1" dialplan.x.applyToCallListDial="0" dialplan.x.applyToDirectoryDial="0"	Refer to Technical Bulletin 11572.
phone1	added	reg.x.server.y.transport and reg.x.outboundProxy.transport	Added "TCPOnly" as a possible value for these existing parameters.
phone1	changed	msg.mwi.x.callBackMode="disabled" to msg.mwi.x.callBackMode="registration" (for x = 2, 3, 4, 5, 6) [changed for bug 13818]	
sip	added	volpProt.server.1.lcs	Refer to Technical Bulletin 5844.

.cfg File	Action	Parameter	Description
sip	added	volpProt.SIP.useSendonlyHold	Can be set to 0 or 1. Null default is 0. Default in sip.cfg is 1. If set to 1, the phone will send a reinvite with a stream mode attribute of "sendonly" when a call is put on hold. This is the same as the previous behavior. If set to 0, the phone will send a reinvite with a stream mode attribute of "inactive" when a call is put on hold. Note: The phone will ignore the value of this parameter if set to 1 when the parameter volpProt.SIP.useRFC2543hold is also set to 1 (default is 0).
sip	added	dialplan.applyToUserSend="1" dialplan.applyToUserDial="1" dialplan.applyToCallListDial="0" dialplan.applyToDirectoryDial="0"	Refer to Technical Bulletin 11572.
sip	changed	dialplan.digitmap.timeOut="3" to "3 3 3 3 3"	Refer to Technical Bulletin 11572.
sip	changed	tcplpApp.sntp.daylightSavings.start.mo nth="4" to "3"	Changes to support new daylight savings time rules.
sip	changed	tcplpApp.sntp.daylightSavings.start.dat e="1" to "8"	
sip	changed	tcplpApp.sntp.daylightSavings.stop.mon th="10" to "11"	
sip	changed	tcplpApp.sntp.daylightSavings.stop.day OfWeek.lastInMonth="1" to "0"	
sip	added	call.stickyAutoLineSeize.onHookDialing	Refer to Administrator's Guide Addendum for SIP 2.1.
sip	changed	voice.gain.rx.digital.chassis.IP_650="-9" to "6"	Gain changes required to match new software load.
sip	changed	voice.gain.rx.digital.ringer.IP_650="-21" to "-12"	
sip	changed	voice.handset.sidetone.adjust.IP_430=" -12" to "-13"	
sip	added	volpProt.server.x.transport and volpProt.SIP.outboundProxy.transport	Added "TCPOnly" as a possible value for these existing parameters.

2.8 Version 2.0.3 B

2.8.1 Added or Changed Features

- 14874: Added support for SoundPoint IP 650 platform
- 15775: Added support for LCD backlight on SoundPoint IP 650
- 15852: Added support for 32 MB of memory on SoundPoint IP 650
- 15853: Added support for G.722 audio code on SoundPoint IP 650
- 16335: Added support for 8 MB of flash on SoundPoint IP 650

- 16686: Added support for USB diagnostics
- 17132: Added visual indication of wideband audio

2.8.2 Removed Features

None.

2.8.3 Corrections

The following issues have been resolved with this release:

None.

2.8.4 Configuration File Parameter Changes

None.

2.9 Version 2.0.3

2.9.1 Added or Changed Features

None

2.9.2 Removed Features

None.

2.9.3 Corrections

- 17981: DHCP initialization incorrect for SoundStation IP 4000 which may cause boot time problems on some servers
- 18491: Network load reported by SoundPoint IP 430 phones is affected by traffic which is not destined for the phone
- 18692: Presence subscribe has "application/pidf+xml" in Accept header although it is not fully supported
- 18766: Ethernet transmit level is low on SoundPoint IP 430 phone
- 18790: Some shared line scenarios do not work with Broadsoft R14 and R13 MP13 releases
- 18919, 11981, 18997: Time stamp in RTCP packets is incorrect
- 19016: SDP containing two "a=" lines causes transfer from a private line to a shared line to fail
- 19082: Phone seizes wrong line making outbound call to FAC *55
- 19210: Too many messages are logged when "so" is set to level 2

2.9.4 Configuration File Parameter Changes

The following configuration file changes have been included in this build in preparation for future inclusion of the IP 650 platform in a software release. Support for the IP 650 is not currently included in this release.

.cfg File	Action	Parameter	Description
sip	added	up.backlight.onIntensity	This parameter controls the intensity of the LCD backlight when it turns on during normal use of the phone. Possible values are 0, 1, 2 or 3. 0 = off 1 to 3 = low, medium, high Null default is 3 (high).
sip	added	up.backlight.idleIntensity	This parameter controls the intensity of the LCD backlight when the phone is idle Possible values are 0, 1, 2 or 3. 0 = off 1 to 3 = low, medium, high Null default is 1 (low). Note: If idleIntensity is set higher than onIntensity, it will be replaced with the onIntensity value.
sip	added	voice.codecPref.IP_650.G711Mu voice.codecPref.IP_650.G711A voice.codecPref.IP_650.G729AB voice.codecPref.IP_650.G722	These parameters allow the voice codec preference list to be set for the SoundPoint IP 650 phone. By default the G.722 codec is the first choice. The use of these parameters is the same as other voice.codecPref parameters.
sip	added	voice.audioProfile.G722.payloadSize voice.audioProfile.G722.jitterBufferMin voice.audioProfile.G722.jitterBufferMin voice.audioProfile.G722.jitterBufferMin	These parameters configure the G.722 voice codec. The use of them is the same as the other voice.audioProfile parameters.
sip	added	voice.gain.rx.analog.chassis.IP_650 voice.gain.rx.analog.ringer.IP_650 voice.gain.rx.digital.chassis.IP_650 voice.gain.rx.digital.ringer.IP_650 voice.gain.tx.analog.chassis.IP_650 voice.gain.tx.digital.chassis.IP_650	These parameters control gain settings which are specific to the SoundPoint IP 650 phone. The values should <u>not</u> be modified.
sip	added	voice.rxEq.hs.IP_650.preFilter.enable voice.rxEq.hs.IP_650.postFilter.enable voice.rxEq.hd.IP_650.postFilter.enable voice.rxEq.hd.IP_650.postFilter.enable voice.rxEq.hf.IP_650.postFilter.enable voice.rxEq.hf.IP_650.postFilter.enable voice.txEq.hs.IP_650.postFilter.enable voice.txEq.hs.IP_650.postFilter.enable voice.txEq.hd.IP_650.preFilter.enable voice.txEq.hd.IP_650.postFilter.enable voice.txEq.hd.IP_650.preFilter.enable voice.txEq.hf.IP_650.postFilter.enable voice.txEq.hf.IP_650.postFilter.enable	These parameters control equalization settings which are specific to the SoundPoint IP 650 phone. The values should not be modified.

.cfg File	Action	Parameter	Description
sip	added	voice.handset.rxag.adjust.IP_650 voice.handset.txag.adjust.IP_650 voice.handset.sidetone.adjust.IP_650 voice.headset.rxag.adjust.IP_650 voice.headset.txag.adjust.IP_650 voice.headset.sidetone.adjust.IP_650	These parameters control gain settings which are specific to the SoundPoint IP 650 phone. The values should <u>not</u> be modified.
sip	added	dir.local.volatile.8meg	This parameter applies only to platforms with 8 Mbytes of flash memory. It can be set to 0 or 1 and is 0 by default. If set to 1, use volatile storage for phoneresident copy of the directory to allow for larger size.
sip	added	dir.local.nonVolatile.maxSize.8meg	This parameter applies only to platforms with 8 Mbytes of flash memory. It can be set from 1 to 100. The units are Kbytes and the default is 100. This is the maximum size of non-volatile storage that the directory will be permitted to consume.
sip	added	log.level.change.usb	This parameter is used to set the logging detail level for the "usb" module.
sip	added	prov.fileSystem.ffs0.8meg.minFreeSpac e	The minimum free space in Kbytes to reserve in the file system when downloading files from the boot server. It is recommended that this value should not be modified. The allowed range for this parameter is 5 to 512 and the default is 512.
sip	added	usb.enable	This parameter enables or disables the USB port on the phone. It can be set to 0 or 1. The Null default is 0.
sip	added	usb.bulkDrive.enable	This parameter enables or disables support for a USB bulk drive ("memory stick") connected to the USB port on the phone. It can be set to 0 or 1. The Null default is 0.
sip	added	usb.bulkDrive.name	This parameter is a string which specifies the name of the mounted USB drive. The Null default is "usbDrive".
sip	changed	dir.local.volatile.maxSize prov.fileSystem.rfs0.minFreeSpace ramdisk.bytesPerBlock res.finder.sizeLimit res.finder.minFree res.quotas.x.value mb.limits.nodes mb.limits.cache	For the SoundPoint IP 650 platform only, the values specified by these parameters are replaced internally with double the value. This is because the SoundPoint IP 650 platform has 32 Mbytes of memory instead of 16 Mbytes.

2.10 Version 2.0.2

2.10.1 Added or Changed Features

• 8428: Split call signaling processing from "lamp management" processing

• 18356: Emergency routing is not supported on shared lines

2.10.2 Removed Features

None.

2.10.3 Corrections

The following issues have been resolved with this release:

- 6527: Shared line does not ring if incoming call arrives when phone is playing dial tone then subsequently hangs up
- 8542: Phone does not display second call appearance in specific bridged line scenario
- 8547: Local ringback is not played if far end does blind transfer without going on hold
- 15671: Pressing a line key of a shared line when a call is remote-busy ends the call
- 16662: Shared line can not establish a call if there are two simultaneous incoming calls
- 18435: If two INVITE's come close together with SDP containing "a=ptime", the phone will crash
- 18471: Setting NAT IP address causes truncation or corruption of IP address in VIA
- 18747: INVITE failover does not work

2.10.4 Configuration File Parameter Changes

None.

2.11 Version 2.0.1 B

2.11.1 Added or Changed Features

None.

2.11.2 Removed Features

None.

2.11.3 Corrections

The following issues have been resolved with this release:

18358: Malformed RTCP packets can crash Cisco gateways.

2.11.4 Configuration File Parameter Changes

None.

2.12 Version 2.0.1

The 2.0.1 Release includes all the changes and corrections from Releases 1.6.6 and 1.6.7

2.12.1 Added or Changed Features

- 8072: Added Nortel MCP NAT traversal parameters to config files
- 11678: Added template support in master configuration file
- 16399: Changed behavior when there is an incoming call on a phone idle dial digits are no longer cleared when an incoming call is received
- 16645: Added support for NAT keep-alive
- 17412: Added ability to set Ethernet link mode to SoundPoint IP 430
- 17413: Added ability to set Ethernet link mode to SoundStation IP 4000

2.12.2 Removed Features

14275: call.callWaiting.prompt has no effect
 This parameter has been removed from the configuration files because it is no longer used.

2.12.3 Corrections

- 7723: Name of net logging module is sometimes corrupted in log file
- 12337: Display of SoundPoint IP 430 flickers under fluorescent lights and may be shifted vertically by a few pixels
- 12382: The phone will freeze if the DNS server address is all zeroes and the phone uses a FQDN server name
- 12647: Feature keys cannot be reconfigured to perform other functions
- 12749: Phone locks up during CERT PROTOS testing
- 15138: Text in line labels on SoundPoint IP 430 should be moved one pixel left
- 15227: Phone model of SoundPoint IP 430 is incorrect in CDP packets
- 15311: Contrast adjustment range on the SoundPoint IP 430 is unsuitable
- 15729: Phone does not retry connecting to boot server in specific scenario
- 15731: Phone should use Office Communicator model to update LCS presence status when multiple endpoints share same registration
- 15812: Phone doesn't handle simultaneous 200/OK and CANCEL race condition
- 16069: When using Russian dictionary, phone reboots after exiting the DHCP Menu
- 16073: Phone does not clear indicators if BLF removed on server

- 16311: Phone with maximum number of line keys configured may have its line key labels overwritten by roaming buddy records
- 16373: Local conference host cannot end conference if one leg is put on hold by far end
- 16562: Expansion Module may reboot if the Do Not Disturb key on the phone is pressed multiple times while the Expansion Module is booting up
- 16577: Local conference host cannot end conference if first leg was put on hold by far end when conference was created
- 16659: To: and Refer-to: domains incorrect during failover
- 16681: In some scenarios a phone may initiate a call using TCP but send an ACK using UDP
- 16768: Inconsistent backlight behavior on SoundStation IP 4000 when resuming a call or conference
- 16904: Excessive logging from "soem" module at boot time in some scenarios involving Expansion Module
- 17009: Non-numeric characters or an invalid IP address when dialing by IP may cause the phone to reboot
- 17068: If the silent ringer is selected, an incoming call can only be answered in hands free mode
- 17102: SoundPoint IP 430 phone locks up instead of rebooting after detecting an operating system suspended task [bug 17037]
- 17188: "Time" information in placed call list contains incorrect data after a transfer has been done
- 17257: Phone loses audio when there is an active call on headset and another incoming call is rejected
- 17206: Local conference host cannot end conference if both legs are put on hold by far ends
- 17242: Local conference host's state changes to "held" when second leg holds and invalid soft keys are displayed
- 17271: Phone will not accept a call with a codec with a dynamic payload identifier
- 17308: Phone displays "In a meeting" status as "Away" when using LCS server
- 17362: Add or edit directory (speed dial) contact crashes phone when configured for roaming buddies
- 17370: Phone may reboot if LCS server is used and presence is enabled without having roaming buddies enabled
 Note: If the LCS server is used, the roaming buddies parameter should be enabled
- 17457: Phone may display incorrect soft keys if a digit is pressed then Menu,
 Directories or Messages is selected then de-selected

- 17573: In some scenarios, phone sends 603-Decline after 2 rings on SCA line
- 17639: Expansion Module updates should be continuously done in the background
- 17656: Phone does not handle outbound fragmented packets that are tagged for VLAN
- 17706: Phone may freeze after regaining connection with LCS server
- 17783: PRACK message goes directly between phones instead of via LCS server because of no record-route
- 17797: In some scenarios, phone sets its own presence status to 'Away' when using the LCS server
- 17831: In some scenarios, phone adds itself to its own buddy list when using the LCS server
- 17976: NTLM signature should include full "From:" URI

2.12.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	removed	call.callWaiting.prompt	
sip	removed	sec.srtp.offer, sec.srtp.require, sec.srtp.key.lifetime	
sip	added	volpProt.SIP.pingInterval	This parameter is used together with reg.x.proxyRequire. It specifies the number of seconds between PING messages sent by the phone. Default = 0 = disabled. Possible range is 0 to 3600. Note: Server support is required before this feature can be used.
sip	added	res.finder.minFree	This parameter is used to ensure that the phone will not download resources which could leave it with insufficient memory to function correctly. A resource will not be downloaded if the phone has less memory free than res.finder.minFree [kBytes]. This parameter can have the values 1 to 2048. The recommended configuration file value is 1200. If the parameter is left empty the default is 800. Notes: Setting this value too small may affect functionality of the phone. Setting this value too large may mean that some resources are not downloaded at boot time.

.cfg File	Action	Parameter	Description
phone1	added	reg.x.proxyRequire	This parameter is used together with volpProt.SIP.pingInterval. It specifies the string which is put in the "Proxy-Require" header. Default is an empty string which means no "Proxy-Require" will be sent. Note: Server support is required before this feature can be used.
phone1	added	nat.keepalive.interval	This parameter is used to set the interval in seconds at which phones will send a keepalive packet to the gateway/NAT device to keep the communication port open so that NAT can continue to function as set up initially. Default value is 0 which means the feature is disabled. The allowable range is 0 to 3600.

2.13 Version 2.0.0 (Beta Release Only)

Note: The 2.0.0 Release does not include the changes and corrections from SIP releases 1.6.6 and 1.6.7

2.13.1 Added or Changed Features

- 2236: Added support for TLS protocol
- 2307: When the phone reboots due to a fatal error, it should first log any useful information
- 5403: Added support for the NTLM authentication protocol
- 5404: Added support for Microsoft Live Communications Server authentication schemes
- 8817: Added support for BLF SCA mode
- 9110: Added support for platform-specific override strings in dictionaries to allow abbreviated strings for certain platforms
- 9734: Added option to select which registration to use for "presence" signaling
- 11646: Added IP QoS support for DSCP (DiffServ)
- 11785: Added support for multiple redundant provisioning servers
- 12270: SIP re-registration interval is now configurable
- 12419: Added support for Broadsoft attendant console/BLF feature
- 12426: Added support for peer-to-peer calls using Microsoft Live Communications Server 2005

- 12427: Added support for calling to and from Windows Messenger 5.1 and Office Communicator using Microsoft Live Communications Server 2005
- 12938: Added caching of the state of the message-waiting indicator LED across controlled reboots
- 13038: Changed "DNS Lookup" name to "Transport" in SIP Configuration menu and on web interface to match parameter name in sip.cfg
- 13080: Added new consultative transfer behavior so that transfer automatically completes when originator hangs up
- 13100: Added support for individual configuration of secondary dial tone
- 13315: Increased the maximum number of buddies to 8 for all platforms except SoundPoint IP 600 and 601 which can watch 48 buddies
- 13317: Increased speed dial menu size limit to 99 for all platforms
- 13463: Added IM support with Office Communicator and Windows Messenger 5.1 in Microsoft Live Communications Server 2005 context
- 13509: Added support for reg.x.address configuration parameter to contain host part
- 13552: Improved boot-up logging
- 13613: Improved support for multiple m lines in SDP
- 13813: Added the ability for file transfers to attempt to contact multiple IP addresses per DNS name
- 13893: Re-enabled idle micro browser configuration
- 14029: Lowered CPU load associated with RTP processing
- 14209: Added support for getting buddy lists from Microsoft Live Communications Server 2005
- 14322: Added per-registration "lcs" parameters
- 14323: Added per-registration outbound proxy parameters
- 14348: Added support for connection reuse draft
- 14496: Added presence support with Windows Messenger 5.1 / Office Communicator in Microsoft Live Communications Server 2005 context
- 14498: Added Windows Messenger 5.1 / Office Communicator-compatible presence and IM support in peer-to-peer mode
- 14556: Added support for roaming access control lists
- 14610: Added ability to store resource files listed in MISC_FILES field in Ethernet Address.cfg in flash file system. For example a dictionary file can be listed which should be used if the phone reboots when the boot server is unavailable.
- 14628: Added support for populating the speed dial list from a roaming buddies list sent by a Microsoft Live Communications Server 2005

- 14638: Changed source port for TCP/TLS connection to be a random value above 32766 after each reboot
- 15180: Added configurable maximum number of servers for redundant boot server feature (11785)
- 15363: Changed call timer format
- 15644: Added a configuration parameter to choose the name of "pval" field in Dialog
- 15987: Reduced default resource quota limits for tones
- 16047: Added configurable ms-forking support and reject IM when it is enabled

2.13.2 Removed Features

- 12109: Removed configuration parameters for localized call progress tones menu
 - In order to still use this feature, see details in 3.1 Upgrading.
- 13447: Removed presence and IM support for Windows Messenger 4.6, 4.7 and 5.0
- 12350: Removed compiled-in Polycom idle display indicator bitmap

2.13.3 Corrections

The following issues have been resolved with this release:

- 6078: Cannot adjust the volume of the reorder tone when attempting to seize a shared line which is remotely active
- 7084: Transducer indicator is not cleared after blind transfer on some platforms
- 9292: IP 4000 reboots upon downloading a wave file with a path containing '\' instead of '/'
- 9709: RTCP not sent or received when calls are on hold
- 9815: SoundStation IP 4000 cannot change language after already changing language 10 to 12 times
- 11177: Fast-Busy sound effect sequencing wrong in specific scenario when call on hold
- 11588: The local contact directory feature cannot be disabled
- 11952: If destination phone rejects a blind transferred call, the far end does not hear a busy tone
- 12020: Bridged line with multiple line keys may have one line indicator left in the remote active state if a peer bridged line hosts a centralized conference
- 12043: Label of CPU Load graph does not change when DSP load is displayed
- 12106: Address of boot server is truncated in Configuration menu on SoundPoint IP 500 and 501 phones when it exceeds a certain length

- 12155: SoundPoint IP 300 and 301 phones have no "Exit" soft key during the ACD login process
- 12308: Cannot place a call from the second line on the phone if the first line is a shared unregistered line
- 12492: SoundPoint IP 601 phone with Expansion Module(s) attached may fail to load the selected language after rebooting
- 12630: When a shared line is being used on another phone, pressing the line key for that line can cause the display to show "Enter number" briefly
- 12711: Phone should play default ring tone if Alert-Info URL is invalid
- 12952: There is no way to reset the user password back to the factory default password
- 13230: No audio on calls resumed from hold in some multiple call scenarios
- 13253: An unregistered SoundStation IP 4000 may reboot if an invalid number is dialed
- 13320: When the micro browser fetches SSL data this can interrupt audio transmitted by the phone
- 13358: My Status menu has two "offline" entries
- 13477: Pressing Hold/Resume soft key twice quickly results in three effective state changes
- 13500: Phone does not use FTP password stored in flash when OVERRIDES_DIRECTORY and CONTACTS_DIRECTORY are configured in this format: "FTP://usr@IP/directory"
- 13512: Parsing of URLs in configuration files does not work for some categories of URLs
- 13579: SDP parser applies wrong logic
- 13793: cnonce generated by the phone is not random
- 13933: Directory menu display is not perfectly cleaned up after deleting all contacts
- 14069: Phone may behave incorrectly if an incoming call is answered on a shared line when another phone sharing the line has Do Not Disturb enabled
- 14083: Wrong expire time might be used when there are multiple contact header lines
- 14126: If a call is placed to a phone with an unread IM, the message-waiting indicator LED stops flashing
- 14172: Phone will reboot when a contact is added to the contact directory which already contains over 40 contacts which are being watched
- 14390: Changing the DNS server configuration via the phone's menu does not have any effect
- 14400: Phone can take up to 30 minutes to boot when there are TCP timeouts

- 14408: Soft key labels do not get updated correctly after hot dial attempt when remote shared line is busy
- 14467: If a URL in *Ethernet Address*.cfg specifies a protocol and user name but no password, the password in flash is not used
- 14635: No welcome sound effect is played on SoundStation IP 4000 phone
- 14664: SoundPoint IP 301 and 501 and SoundStation IP 4000 phones fail during a reboot if 12 SAS-VP appearances are configured
- 14781: Cannot use special characters for filenames with TFTP boot server
- 14844: A failed download of a pre-existing file causes that file to be deleted
- 14858: Phone reboots if idle micro browser is running and the Status –
 Platform Application menu is displayed
- 15007: If the server address flash parameter is a URL which specifies a protocol and user name but not password, the password in flash is not used
- 15101: Provisioning of phone stalled forever in specific scenario
- 15145: SAS-VP feature does not work correctly when the filename parameter is empty
- 15154: Phone does not behave correctly when it is disconnected from the network and is using SAS-VP
- 15185: Editing problems exist with long strings
- 15214: Headset memory indicator is not restored after adjusting volume on some platforms
- 15269: When tcplpApp.sntp.gmtOffset.overrideDHCP is set but no override value is given, the DHCP based offset is not applied
- 15351: Blind transfer does not drop unless server sends signaling to drop the call on the originator's phone. Problem will occur in pure proxy scenarios only.
- 15368: Character appears to be deleted during editing
- 15412: TFTP URL of configuration file name in log file may be truncated
- 15455: Phone should not reboot if parameters are missing from flash file system
- 15463: Phone's presence status is not displayed on UI on SoundPoint IP 300 and 301 phones
- 15554: Problems with password entry for very long passwords
- 15561: Phone may reboot after entering a long incorrect password
- 15571: Phone cannot recover in several scenarios involving transferring mixed URL and E.164 calls
- 15603: The 'sip:' field name which appears when using IP dialing should not be deletable

- 15679: Ring Type 12 (Ringback-style) sounds incomplete after the first ring
- 15694: Phone crashes and reboots when 'Exit' is pressed from Network Configuration menu in Korean Language
- 15730: If a menu is displayed when a call is missed on the SoundPoint IP 300 and 301 phones, the missed call count is not updated on the idle display
- 15766: Display is incorrect after selecting name dialing then entering and exiting a call list while dial tone is playing
- 15781: After putting a local conference on hold then splitting the calls then joining them, the first call may remain on hold
- 15855: In the Instant Msg menu of the SoundPoint IP 300 and 301 phones, "x/Ascii" is not displayed after pressing the "1/A/a" softkey

2.13.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	volpProt.server.x.expires.overlap	The number of seconds before the expiration time returned by server 'x' at which the phone should try to re-register. The phone will try to re-register at half the expiration time returned by the server if that value is less than the configured overlap value. Default = 60. Minimum = 5, maximum = 65535.
sip	added	volpProt.SIP.ms-forking	Default = 0. Can be 0 or 1. 0 = Support for MS-forking is disabled. 1 = Support for MS-forking is enabled and the phone will reject all Instant Message INVITEs. This parameter is relevant for LCS server installations. Note that if any endpoint registered to the same account has MS-forking disabled, all other endpoints default back to non-forking mode. Windows Messenger does not use MS-forking so be aware of this behavior if one of the endpoints is Windows Messenger.
sip	added	volpProt.SIP.dialog.usePvalue	Default = 0. Can be 0 or 1. 0 = Phone uses "pval" field name in Dialog. This obeys the draft-ietf-sipping-dialog- package-06.txt draft. 1 = Phone uses a field name of "pvalue".
sip	added	volpProt.SIP.connectionReuse.useAli as	Default = 0. Can be 0 or 1. 0 = old behaviour 1 = Phone uses the connection reuse draft which introduces "alias".
sip	added	se.pat.callProg.15.name="secondary dial" se.pat.callProg.15.inst.1.type="chord" se.pat.callProg.15.inst.1.value="1"	Same configuration method as primary dial tone. Allows a different tone to be configured for secondary dial tone.

.cfg File	Action	Parameter	Description
sip	added	qos.ip.rtp.dscp	This parameter allows the DSCP of packets to be specified. If set to a value this will override the other qos.ip.rtp parameters. Default is Null which means the other qos.ip.rtp parameters will be used. Possible values are 0 to 63, EF, AF11, AF12, AF13, AF21, AF22, AF23, AF31, AF32, AF33, AF41, AF42 or AF43.
sip	added	qos.ip.callControl.dscp	This parameter allows the DSCP of packets to be specified. If set to a value this will override the other qos.ip.callControl parameters. Default is Null which means the other qos.ip.callControl parameters will be used. Possible values are 0 to 63, EF, AF11, AF12, AF13, AF21, AF22, AF23, AF31, AF32, AF33, AF41, AF42 or AF43.
sip	added	pres.reg	Default = 1. Can be 1, 2, 3, Must be a valid line/registration number. If the number is not a valid line/registration number, it is ignored. Specifies the line/registration number used to send SUBSCRIBE for presence.
sip	added	mb.idleDisplay.home	mb.idleDisplay.home can be empty or any fully formed valid HTTP URL. Length up to 255 characters. Default is empty. This specifies the URL used for the microBrowser idle display home page. Example: http://www.example.com/xhtml/frontpage.cgi?page=home. If empty, there will be no micro Browser idle display feature.
sip	added	mb.idleDisplay.refresh	Can be 0 or an integer greater than 5. Values from 1 to 4 will be ignored, and 5 will be used instead. Default = 0 This specifies the period in seconds between refreshes of the microBrowser idle display content. 0 = the idle display microBrowser is not refreshed. Note: If an HTTP Refresh header is detected, it will be respected, even if this parameter is set to 0. The use of this parameter in combination with the Refresh HTTP header may cause the idle display to refresh at unexpected times.
sip	removed	volpProt.SIP.WM50	For selecting between Windows Messenger 4.7 and 5.0 (no longer supported).

.cfg File	Action	Parameter	Description	
sip	removed	Icl.ml.lang.cpt.x, Icl.cpt, Icl.cpt.menu.x, Icl.cpt.chord.cp.x.y.freq.z, feature.10.name = cpt-settings feature.10.enabled = 1	Removed the parameters used to configure the call progress tone localization menu. In order to still use this feature, the old configuration parameters should be added to the sip.cfg file and a new parameter, feature.cpt.enabled, must be added and set to 1.	
sip	changed	tone.chord.ringer.46.offDur from 200 to 0, tone.chord.ringer.46.repeat from 1 to 2 Settings for se.pat.ringer.12	Changes to make ring type 12 work as expected.	
sip	changed	voice.gain.tx.digital.chassis.IP_430 from -3 to 0 voice.handset.txag.adjust.IP_430 from 24 to 21	Gain corrections for SoundPoint IP 430 platform.	
sip	changed	bitmap.IP_400.61.name from IdleDefault to "" bitmap.IP_500.61.name from IdleDefault to "" bitmap.IP_600.65.name from IdleDefault to "" bitmap.IP_4000.66.name from IdleDefault to ""	Removed compiled-in Polycom idle display indicator bitmap.	
sip	changed	HEADSET_MEM IP_300 indicator to use indicator #50 HEADSET_MEM IP_500 indicator to use indicator #50 ind.class.4.state.6.index from 48 to 50	Changed due to rearrangement of other indicators.	
sip	changed	ind.anim.IP_400.38.frame.1.bitmap from IdleDefault to "" ind.anim.IP_500.38.frame.1.bitmap from IdleDefault to "" ind.anim.IP_500.39.frame.1.bitmap from IdleDefault to "" ind.anim.IP_600.38.frame.1.bitmap from IdleDefault to "" ind.anim.IP_600.39.frame.1.bitmap from IdleDefault to "" ind.anim.IP_4000.38.frame.1.bitmap from IdleDefault to "" ind.anim.IP_4000.39.frame.1.bitmap from IdleDefault to "" ind.anim.IP_4000.39.frame.1.bitmap from IdleDefault to ""	Removed compiled-in Polycom idle display indicator bitmap.	
sip	changed	res.quotas.1.value from 2000 to 600	Reduced default resource quota limits for tones.	
phone1	added	reg.x.lcs	Default = 0. Can be 0 or 1. If set to 1 the LCS server is supported for registration 'x'.	
phone1	added	reg.x.server.y.expires.overlap	Same interpretation as volpProt.server.y.expires.overlap for registration 'x'.	
phone1	added	reg.x.outboundProxy.address	Same interpretation as voipProt.SIP.outboundProxy.address for registration 'x'.	

.cfg File	Action	Parameter	Description
phone1	added	reg.x.outboundProxy.port	Same interpretation as voipProt.SIP.outboundProxy.port for registration 'x'.
phone1	added	reg.x.outboundProxy.transport	Same interpretation as voipProt.SIP.outboundProxy.transport for registration 'x'.
phone1	added	attendant.uri	For attendant console / BLF feature. This specifies the list SIP URI on the server. If this is just a user part, the URI is constructed with the server host name/IP
phone1	added	attendant.reg	For attendant console / BLF feature. This is the index of the registration which will be used to send a SUBSCRIBE to the list SIP URI specified in attendant.uri. For example, attendant.reg = 2 means the second registration will be used.
phone1	added	roaming_buddies.reg	Specifies the line/registration number which has roaming buddies support enabled. Default is empty which means roaming buddies is disabled. If value < 1 then value is replaced with 1. This parameter is relevant for LCS server installations.
phone1	added	roaming_privacy.reg	Specifies the line/registration number which has roaming privacy support enabled. Default is empty which means roaming privacy is disabled. If value < 1 then value is replaced with 1. This parameter is relevant for LCS server installations.

2.14 Version 1.6.7

2.14.1 Added or Changed Features

- 15930: Added ability to set Ethernet link mode on SoundPoint IP 601
- 15981: Added menu options for setting Ethernet link mode on SoundPoint IP 601
- 16376: Improved response time of phone to SIP messages
- 16482: Added option for phone to be more assertive in negotiating the preferred codec
- 16500: Added configurable line-seize behavior

2.14.2 Removed Features

None.

2.14.3 Corrections

 16027: When connecting to voicemail in specific scenario, phone may have no audio

- 16075: Phone plays re-order tone when taking call off hold in specific scenario
- 16100: BLA line key status is not maintained in specific scenario
- 16116: Cannot register lines 7 to 12 from SIP configuration menu
- 16149: Line key LEDs for BLA lines can switch from one line key to another in specific scenario
- 16250: Comfort noise received by phone is handled incorrectly
- 16374: Phone keeps sending NOTIFY if 481 received in early NOTIFY
- 16388: Removed DC bias from Tx signal
- 16429: Web interface does not have configuration options for lines 7 to 12
- 16459: Phone is unable to park a call that is received via ACD final destination
- 16480: BLA Led gets stuck and there is a phantom NOTIFY from the phone in a particular scenario.
- 16485: Notify Talk is ignored if interval between it and 180 is too brief
- 16565: Dialed digits can be lost if they are dialed too quickly after selecting an SCA line
- 16599: SoundPoint IP 300 and 301 phones reboot when using G.729 codec in a conference call with SIP 1.6.6 C software
- 16660: Failover to backup SIP server does not occur when hostname of primary cannot be resolved via DNS
- 16691: Dialog does not get removed after its expiration time in some scenarios. This addresses #16374 and #16480.
- 16813: Going on and off hook repeatedly on a shared line may result in the line showing an active call state when the handset is physically on-hook
- 16915: Phone sends SIP requests to port 5060 regardless of volpProt.SIP.outboundProxy.port configuration setting
- 17014: When a shared line call is on hold, using on-hook dialing seizes the last used line instead of the first available line
- 17284: An unnecessary ACK is sent by the phone if no reply is received within 32 seconds

2.14.4 Configuration File Parameter Changes

.cf Fil	_	Parameter	Description
sip	added	volpProt.SDP.answer.useLocalPreferences	Can be 0 or 1. Use this new parameter to have the phone use its own preference list when deciding which codec to use rather than the preference list in the offer. Null default = 0 = disabled.

.cfg File	Action	Parameter	Description
sip	added	call.stickyAutoLineSeize	Can be 0 or 1. Set to 1 to make the phone use "sticky" line seize behavior. This will help with features that need a second call object to work with. The phone will attempt to initiate a new outgoing call on the same SIP line that is currently in focus on the LCD (this was the behavior in SIP 1.6.5). This may fail due to glare issues in which case the phone may select a different available line for the call. Null default = 0 = disabled (this was the behavior in SIP 1.6.6).

2.15 Version 1.6.6 C (Limited Distribution)

2.15.1 Added or Changed Features

None.

2.15.2 Removed Features

None.

2.15.3 Corrections

- 16250: Comfort noise received by phone is handled incorrectly. Fixed for SoundPoint IP 300, 301, 500, 501, 600 and 601 phones.
- 16388: DC bias should be removed from Tx signal on SoundPoint IP 300, 301, 500, 501, 600 and 601 phones

2.15.4 Configuration File Parameter Changes

None.

2.16 Version 1.6.6 B

2.16.1 Added or Changed Features

• Add Support for SoundPoint IP 430 hardware platform

2.16.2 Removed Features

None.

2.16.3 Corrections

None

2.16.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	voice.gain.rx.analog.chassis.IP_430, voice.gain.rx.analog.ringer.IP_430, voice.gain.rx.digital.chassis.IP_430, voice.gain.rx.digital.ringer.IP_430, voice.gain.tx.analog.chassis.IP_430, voice.gain.tx.digital.chassis.IP_430, voice.gain.tx.analog.preamp.chassis.IP_430	New gain parameters for SoundPoint IP 430 platform.
sip	added	voice.rxEq.hs.IP_430.preFilter.enable, voice.rxEq.hs.IP_430.postFilter.enable, voice.rxEq.hd.IP_430.preFilter.enable, voice.rxEq.hd.IP_430.postFilter.enable, voice.rxEq.hf.IP_430.preFilter.enable, voice.rxEq.hf.IP_430.postFilter.enable	New Rx EQ parameters for SoundPoint IP 430 platform.
sip	added	voice.txEq.hs.IP_430.preFilter.enable, voice.txEq.hs.IP_430.postFilter.enable, voice.txEq.hd.IP_430.preFilter.enable, voice.txEq.hd.IP_430.postFilter.enable, voice.txEq.hf.IP_430.preFilter.enable, voice.txEq.hf.IP_430.postFilter.enable	New Tx EQ parameters for SoundPoint IP 430 platform.
sip	added	voice.handset.rxag.adjust.IP_430, voice.handset.txag.adjust.IP_430, voice.handset.sidetone.adjust.IP_430, voice.headset.rxag.adjust.IP_430, voice.headset.txag.adjust.IP_430, voice.headset.sidetone.adjust.IP_430	New handset and headset gain adjustments for SoundPoint IP 430 platform.
sip	added	font.IP_400.1.name	New dynamic font download parameter for SoundPoint IP 430 platform.
sip	added	bitmap.IP_400.61.name	New bitmap parameter for SoundPoint IP 430 platform.
sip	added	ind.anim.IP_400.38.frame.1.bitmap, ind.anim.IP_400.38.frame.1.duration	New animation parameters for SoundPoint IP 430 platform.
sip	changed	ind.gi.IP_400	Changed the values of some of these indicator parameters for the SoundPoint IP 430 platform.

2.17 Version 1.6.6

2.17.1 Added or Changed Features

- 15491: Added configurable option to enable phone with BLA to send re-INVITE during conference setup
- 13315: Increased the maximum number of buddies to 8 for all platforms except SoundPoint IP 600 and 601 which can watch 48 buddies

2.17.2 Removed Features

None.

2.17.3 Corrections

The following issues have been resolved with this release:

- 11658: Phone continues to append to log file on FTP boot server after that file has reached its configured size limit
- 12613: SoundPoint IP600 and 601 phones may establish a call with no audio after holding, resuming and ending multiple calls
- 12949: If the phone's first line is a shared line and cannot obtain dial tone, pressing the "NewCall" soft key does not activate the first available line
- 14673: Special characters such as '@', ':' and '?' are not accepted as part of the FTP or HTTP password
- 14968: If the phone reboots, the app.log size can increase past the size limit
- 15002: If the phone's first line is unregistered, pressing the "NewCall" soft key does not activate another line
- 15127: Phone may have one-way audio in a call after multiple transfers have been done
- 15218: If multiple contact header fields contain multiple expire values, the phone does not always pick the lowest non-zero value
- 15235: Phone will freeze if the SAS-VP server becomes unavailable when the phone application is starting
- 15339: ACK lacks the same authorization credentials as the INVITE which is a failure to comply with RFC 3261
- 15419: Blind transfer doesn't work for URL calling
- 15568: A comma in quotes in SIP address headers should be interpreted correctly
- 15596: Remote phone can force local conference host to resume call unexpectedly in specific scenario
- 15615: When a shared line call is on hold, lifting the handset seizes the last used line instead of the first available line
- 14939: Shared line user must press "Answer" soft key twice to answer an incoming call in some scenarios
- 15907: After a reboot, a phone may show "1 new missed call" which can't be cleared until another call is missed
- 15982: The SDP session identifier should not be changed on each re-INVITE
- 16021: FTP downloads may fail because incorrect timeouts are used
- 16141: Phone with a shared line loses hot dialed digits when remote shared line changes state, such as placing an active call on hold

• 16161: Phone with a shared line displays the wrong soft key labels after attempting to hot dial when the remote shared line is in use

2.17.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	call.shared.exposeAutoHolds	call.shared.exposeAutoHolds="1" means that on a shared line, when setting up a conference, a re-INVITE will be sent to the server. call.shared.exposeAutoHolds="0" means no re-INVITE will be sent to the server. Default is "0".

2.18 Version 1.6.5

2.18.1 Added or Changed Features

- 8072: Added support for Nortel MCP NAT traversal
- 11805: Changed behavior when a local conference is terminated. The remote conference legs are transferred so that the remote parties can continue the conversation.
- 13193: Added configuration options to allow configuration file parameters to override DHCP values for SNTP server address and GMT offset
- 13527: Added support for setting SIP server address from DHCP option 151
- 13509: Added allowing reg.x.address to contain host part instead of being a user part only
- 13492: CA certificate expiry is no longer checked if SNTP has not been configured
- 14052: Added flash parameter for SoundPoint IP 601phones to toggle power requirements in CDP between 5W (no Expansion Modules can be connected) and 12W (three Expansion Modules can be connected) with a default setting of 5W

This "EM Power" flash parameter is accessible when the SIP application is running under the Network Configuration menu. Note that no Expansion Modules can be connected to the phone when the "EM Power" parameter is disabled. The default setting for this parameter is Enabled (i.e. 12W power requirement). In order for the correct CDP power requirements to be reported at boot time as well, bootROM version 3.1.3 is required. See Tech Bulletin TB14052 for details on how to use this feature.

• 14886: Changed power reported via CDP to platform-specific values In order for these CDP power requirements to be reported at boot time as well, bootROM version 3.1.3 is required.

• 15012: Added a workaround to restart the application on the phone if many tasks get unrealistic task delays during startup (Outstanding issue 11653)

2.18.2 Removed Features

None.

2.18.3 Corrections

The following issues have been resolved with this release:

- 11264: SoundStation IP 4000 hangs when booting if custom DHCP option 150 of type String is used
- 11302: SoundPoint IP 300 and 301 incorrectly truncate displayed line label if the reg.x.label field is empty and reg.x.address is longer than 4 characters
- 13904: SoundStation IP 4000 always shows LAN Mode as half-duplex
- 14077: Under certain DNS failover conditions, the phone stops sending DNS and SIP requests
- 14110: Phone does not reset to using "All Certificates" for CA Certificates after the user chooses the Reset Device Settings menu option
- 14163: Phone incorrectly updates Placed Calls list with an empty entry after New Call then End Call are pressed
- 14166: Calls answered on a phone with a shared line are incorrectly logged in the Received Calls list of another phone sharing that line
- 14474: Phone won't upload all log files to TFTP boot server if LOG_FILE_DIRECTORY specified in < Ethernet Address>.cfg doesn't exist
- 14509: If the SAS-VP xml response has a blank or missing "contactaddr" element, the phone does not use the "username" field for the contact address and may lock up during reboot
- 14510: The "username" field in a SAS-VP xml response is not used as the SIP login name for authentication of SIP messages
- 14557: The SAS-VP key is cleared if the user chooses the Reset Device Settings menu option
- 14634: Blind transfer fails with certain devices due to NOTIFY behavior.
- 14684: Problems with text entry interface in custom certificate installation display
- 14805: Shared lines behave incorrectly if the line registration contains a '.'
- 14935: Phone begins to ring when there is no incoming call in specific shared line scenario
- 15104: SoundStation IP 4000 CDP does not advertise new link duplex levels correctly
- 15122: Time displayed on phone changes from correct to incorrect shortly after a reboot in some scenarios

• 15162: Phone clears application log file during a warm boot even if the upload to the boot server failed

2.18.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	volpProt.server.dhcp.available	1 = check with the DHCP server for SIP server IP address.
			0 = do not check with DHCP server. Default = 0.
sip	added	volpProt.server.dhcp.option	Option to request from the DHCP server if volpProt.server.dhcp.available = 1. Allowable range is 128 – 255. There is no default value for this parameter, it must be filled in with a valid value.
sip	added	volpProt.server.dhcp.type	0 = IP address 1 = string Type to request from the DHCP server if volpProt.server.dhcp.available = 1. There is no default value for this parameter, it must be filled in with a valid value.
sip	added	tcplpApp.sntp.address.overrideDHCP and tcplpApp.sntp.gmtOffset.overrideDHCP	These parameters determine whether configuration file parameters override DHCP parameters for the SNTP server address and GMT offset. The default is 0 which means that DHCP values will override configuration file parameters. A value of 1 means that configuration file parameters will override DHCP values.

2.19 Version 1.6.4

2.19.1 Added or Changed Features

- 12278: Added support for SAS-VP v3 XML configuration transactions
- 12883: Added sending and processing the "early-only" flag in the "replaces" header to support RFC 3891 in call pickup
- 12890: Added accepting SDP with telephone-event on the first line
- 13492: Disabled CA certificate expiry checking when SNTP has not been configured

2.19.2 Removed Features

None.

2.19.3 Corrections

The following issues have been resolved with this release:

- 7707: LED which shows mute and incoming-call and message-waiting status can show incorrect state
- 8598: There is no "1/A/a" soft key when editing Forward contact

- 12626: Phone reboots on installation of a custom certificate
- 12882: Display of time and date on SoundStation IP 4000 gets truncated during a call if the line label is 10 digits long
- 13034: Phone should stop sending further NOTIFY messages if 481 response received
- 13318: SoundStation IP 4000 file system is smaller than it should be
- 13440: Changes in APP_FILE_PATH cause unnecessary application changes Note: This fix requires bootROM version 3.1.2.
- 13507: The phone at times incorrectly maintains two SUBSCRIBEs for call-info
- 13533: The phone doesn't upload directory or configuration override files to a TFTP server unless they already exist on the server
- 13553: The "entity" field in a dialog for private lines can be improperly formatted
- 13554: A phone in the offering state should send a NOTIFY response to a dialog SUBSCRIBE request for all lines except Bridged Lines
- 13582: "Supported" header in INVITE should contain "replaces" instead of "replace"
- 13699: VLAN from CDP may work intermittently on SoundStation IP 4000
- 14116: After a blind transfer fails, the call cannot be retrieved
- 14219: RTP sequence numbering starts at wrong value after a call is resumed from hold
- 14220: Lost packets statistics are incorrect after far end resumes a call
- 14387: A display name containing a '.' is not displayed in some scenarios

2.19.4 Configuration File Parameter Changes

None.

2.20 Version 1.6.3

2.20.1 Added or Changed Features

- 11358: Added configurable subdirectories for configuration and contact directory override files
- 12761: Added support for setting flash parameters from configuration file
- 13029: Added support for new dialog event package draft draft-ietf-sipping-dialog-package-06.txt
- 13030: Added support for new BLA draft draft-anil-sipping-bla-02.txt
- 13222: Changed maximum number of XML retries for SAS-VP to be equal to 7 days

• 13931: Added notice of file system fix for bug 13361 to header of SoundStation IP 4000 binary image

2.20.2 Removed Features

• 13025: Disabled url-dialing in main partner configuration files

2.20.3 Corrections

The following issues have been resolved with this release:

- 11271: Phone repeatedly tries to upload log file when log.render.file parameter disabled
- 12449: Shared line continues to ring after receiving a CANCEL event in some scenarios
- 12470: Misplaced comma in date display for two possible date formats
- 12748: Caller ID shows IP address when PSTN caller is unknown
 Note: The "url-dialing" feature must be disabled in order for the IP address to be hidden
- 12842: Some characters sent in the dial string should be escaped but are not
- 13089: Outbound proxy port greater than 6535 does not work
- 13198: Long date format gets changed to short date format after first call
- 13223: All user agent headers for SAS-VP v3 must include < Ethernet address>
- 13228: Audio lost for the first call after rejecting the second incoming call if headset or hands free is used
- 13235: Repeatedly holding and resuming a call can result in no audio when the call is resumed
- 13258: Frequent registration retry to an inactive server after server failover can result in the phone being unable to put a call on hold
- 13285: Unverified SSL connections were allowed to SAS-VP server
- 13289: Long date format does not work if a shared line calls itself
- 13361: IP 4000 security certificate (HTTPS and SAS-VP provisioning) can become corrupt after file system activity.

Note: BootROM must be upgraded to version 3.1.2 as instructed in Technical Bulletin TB13361

 13517: Hands free dial-tone volume can become very quiet after significant volume adjustment

2.20.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
00000000000	added	CONTACTS_DIRECTORY, OVERRIDES_DIRECTORY	New fields which can specify a directory on the boot server in which contact overrides (<i><ethernet address=""></ethernet></i> -directory.xml) and configuration overrides (<i><ethernet address=""></ethernet></i> -phone.cfg) should be stored.
sip	added	volpProt.SIP.dialog.useSDP	0 or Null: New dialog event package draft is used (no SDP in dialog body).1: For backwards compatibility, use this setting to send SDP in dialog body.
sip	changed	feature.9.enabled	The "url-dialing" feature must be disabled by setting feature.9.enabled="0" in order to prevent unknown callers from being identified on the display by an IP address.

2.21 Version 1.6.2

2.21.1 Added or Changed Features

None.

2.21.2 Removed Features

None.

2.21.3 Corrections

The following issues have been resolved with this release:

- 9580: Changes in < Ethernet address>.cfg will not be detected during configuration polling
- 11190: Incorrect time zone is used for one to two minutes after a reboot
- 12552: Phone reboots if line keys on Expansion Module are pressed rapidly and continuously
- 12841: Far end phone continues to ring if near end phone ends call prior to far end answering in specific shared-line scenario
- 12951: Malformed RTP packets received by phone can cause it to crash

2.21.4 Configuration File Parameter Changes

None.

2.22 Version 1.6.1

2.22.1 Added or Changed Features

- 12296: Pressing and holding unassigned line key adds a directory contact
- 12366: Application log is uploaded shortly after reboot

2.22.2 Removed Features

None.

2.22.3 Corrections

The following issues have been resolved with this release:

- 11388: Phone does not get a CDP response reliably in some scenarios
- 12208: Indicator for watched contact remains red if speed dial line removed
- 12247: Two-stage dialing user interface not correct
- 12348: Handsfree and handset buttons do not work correctly to answer call when silent ringer is selected
- 12364: Cannot establish a centralized conference from one of the conference legs
- 12475: One-Touch Voicemail dialing does not support multiple lines correctly
- 12506: INVITE message never tried on backup proxy when primary server fails over
- 12640: CDP word on SoundPoint IP 601 needs to advertise maximum power to Cisco switch
- 12775: Phone cannot join more than two legs to centralized conference

2.22.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	changed	voice.audioProfile.xxx parameter values and voice.gain.xxx parameter values	Use the new values for these parameters.

2.23 Version 1.6.0 (Beta only)

2.23.1 Added or Changed Features

- 4614: Added display of date and time during a call
- 9046: Added support for SoundPoint IP Expansion Module
- 9108, 10480: Added support for SoundPoint IP 601 hardware platform
- 9660: Pressing and holding an assigned speed dial "line key" opens the contact directory to that entry
- 11540: Improved speed dial key assignment
 - When perusing the contact directory, pressing and holding an unassigned line key assigns the in-focus directory entry to that key as a speed dial. A confirmation beep is heard.
 - When a new directory entry is added, the speed dial index is automatically assigned the next available value.
- 11731: Calls from more than one SIP registration (line) can be joined

- 11849: Added support for transfer dispatch during consultation call proceeding state
 - New parameter for this is volpProt.SIP.allowTransferOnProceeding which will normally not need to be changed.
- 12093: Added a Forward menu so that forwarding can be modified at any time

2.23.2 Removed Features

None.

2.23.3 Corrections

The following issues have been resolved with this release:

- 7521: Transfer from a shared line can be interrupted
- 8507: Directory search does not produce all matches for some last names
- 9790: Outbound proxy transport selection should be clear New parameter for this is volpProt.SIP.outboundProxy.transport.
- 9827: A keypad-initiated reboot waits for dial tone to time out before starting
- 11583: Phone does not upload log file when it exceeds render file size
- 11738: Audio Diagnostics don't work for headset mode
- 11762: Headset indicator/icon can blink during a call between two phones using the same bridged line which have headset memory enabled
- 11790: Multi-tap entry doesn't work for the very first character entered for URL dialing
- 11846: 484 response should be treated as an error in ringback state
- 11848: No stuttered dial tone when a line has a message waiting
- 11940: Phone holds the call when a fourth party is added to a centralized conference
- 11946: Some clock date format selections do not work
- 12032: Pressing headset button in ringing state does not answer call when headset memory is enabled
- 12066: After editing contact directory items, the "Save" soft key can get relabeled as "Search"
- 12191: The menu produced when the Directories key is pressed should not include the "Messages" option
- 12221: '-1' displayed as number of different priority messages for voice message feature when data is missing
- 12227: Phone attempts to forward a call to a shared line if Auto Divert is enabled for the contact making the call
- 12247: Two-stage dialing does not work

- 12284: Time handling for DHCP needs to be improved
- 12289: Common audio equalization tables should be grouped together
- 12323: Exiting Display Diagnostics with termination key does not stop display diagnostics
- 12333: "Direct" and "Group" soft keys can appear when directed and group call pickup features are disabled
- 12370: Ringing can be heard during a connected call mixed with audio when there is a high number of unanswered incoming calls
- 12541: Error messages can appear in log file after putting two calls on hold

2.23.4 Configuration File Parameter Changes

.cfg File	Action	Parameter	Description
sip	added	volpProt.SIP.allowTransferOnProceeding	0 = don't allow transfer during consultation call proceeding state 1 = do allow it (1 is the default)
sip	added	volpProt.SIP.outboundProxy.transport	Same function and possible values as existing volpProt.server.x.transport parameter. Default is DNSnaptr.
sip	added	voice.gain.rx.analog.chassis.IP_601, voice.gain.rx.analog.ringer.IP_601, voice.gain.rx.digital.chassis.IP_601, voice.gain.rx.digital.ringer.IP_601, voice.gain.tx.analog.chassis.IP_601, voice.gain.tx.digital.chassis.IP_601, voice.gain.tx.analog.preamp.chassis.IP_601	Gains specifically for the IP 601 platform.
sip	changed	voice.aec.xxx	Changed parameter values. Do not modify these.
sip	changed	voice.ns.xxx	Changed parameter values. Do not modify these.
sip	added/ removed	voice.rxEq.xxx	This whole section has changed and must be used. Do not modify these.
sip	added/ removed	voice.txEq.xxx	This whole section has changed and must be used. Do not modify these.
sip	added	log.level.change.sotet, log.level.change.ttrs	Added log level control for logging related to Expansion Module.

3. Notes

3.1 Upgrading

This section lists the changes that should be made to configuration files when using the centralized (boot server) provisioning model. For general guidelines, see the Updating and Rebooting information in Section 4.3 of the Administrator Guide.

3.1.1 From Version 2.2.1 to 2.2.2

3.1.1.1 Mandatory Changes

None.

3.1.1.2 Optional Changes

• TCP Keep-Alive message when using TLS

Configure the *tcplpApp.KeepAlive* parameters as detailed in Section 2.1.4 if using TLS and there is a risk of the TCP connection being improperly terminated.

Read-only Contact Directory

If it is desired to centrally manage the phones directory, the user can be restricted from making any changes. To enable this capability set *dir.local.read-only* = "1"

Disable Presence (MyStat and Buddies) soft-keys when using the Presence feature signalling

Some call servers use the phones 'Presence' feature for controlling BLF capability but don't implement the full suite of Presence options. To avoid giving the user visibility to this setting, the idle soft-keys may be removed from the phone UI by setting *pres.idleSoftKeys="0"*

3.1.2 From Version 2.2.0 to 2.2.1

3.1.2.1 Mandatory Changes

None.

3.1.2.2 Optional Changes

None

3.1.3 From Version 2.1.2 to 2.2.0

3.1.3.1 Mandatory Changes

New configuration file settings for audio

The entire "voice" section in the latest sip.cfg must be used to ensure good audio quality.

New configuration file settings for indicators

The entire "indicators" section in the latest sip.cfg must be used to ensure correct icons on the display.

3.1.4 From Version 2.1.1 C to 2.1.2

3.1.4.1 Mandatory Changes

 Adding logging of version information for configuration files
 In order for this new feature to work, the latest version of all configuration files must be used.

3.1.4.2 Optional Changes

Using different versions of configurable items in < Ethernet address>.cfg for different phone models or platforms

Different phone models or platforms can be configured to use different application files, configuration files, log file directory etc. See technical bulletin TB35361 for details.

- Optimizing failover behavior for authentication signaling
 Use the new parameters volpProt.SIP.authOptimizedInFailover in sip.cfg and
 reg.x.auth.optimizedInFailover in phone1.cfg to change the phone's failover behavior
 during authentication signaling if desired.
- Viewing message waiting indicators while still retaining one-touch voicemail access when multiple lines are configured

If a phone has multiple lines with just one registration set to have msg.mwi.x.callBackMode = "registration" and all others set to have msg.mwi.x.callBackMode = "disabled" but it is desirable to be able to see message waiting indicators for all lines and still retain one-touch voicemail access, set the new parameter up.mwiVisible to 1 in sip.cfg.

3.1.5 From Version 2.1.1 to 2.1.1 C

3.1.5.1 Mandatory Changes

None.

3.1.5.2 Optional Changes

None.

3.1.6 From Version 2.1.0 to 2.1.1

3.1.6.1 Mandatory Changes

None.

3.1.6.2 Optional Changes

- Using URI from call's contact header in refer-to header
 Set the parameter volpProt.SIP.useContactInReferTo to 1 in sip.cfg if the URI from the initial call's Contact header should be used in REFER's refer-to header when setting up a transfer. The previous and default behavior is to use the URI from the initial call's To header.
- Supporting G.729 Annex B SDP signalling per RFC 3555
 If the new parameter voice.vad.signalAnnexB in sip.cfg is set to 1, a new attribute

line will be added to SDP. See details in 2.6.4 Configuration File Parameter Changes.

3.1.7 From Version 2.0.3 to 2.1.0

3.1.7.1 Mandatory Changes

Using a Microsoft LCS Server

It may be required to set the new parameters volpProt.server.x.lcs (in sip.cfg) and reg.x.server.y.lcs (in phone1.cfg) if the phone registers to a Microsoft LCS server.

3.1.7.2 Optional Changes

• Using "inactive" stream mode attribute when a call is put on hold

The default behavior is for the "sendonly" stream mode attribute to be used when a call is put on hold. This behavior can be changed to use the "inactive" attribute. In order to configure this behavior, the parameter volpProt.SIP.useSendonlyHold must be set to 0.

• Digit map extension support

The digit map can be configured to remove, add or replace digits. For details see Technical Bulletin 11572.

Restricting transport to TCP

The transport used by the phone can be restricted to TCP. This means the phone will not attempt to fail over to UDP if TCP fails. A new "TCPOnly" option has been added to all parameters which control the transport used by the phone.

Adding "sticky line seize" behavior for hot-dial (on-hook) dialing If sticky behavior is desired for hot dialing this can be configured using the new call.sticky.AutoLineSeize.onHookDialing parameter. Hot dialing sticky behavior

call.sticky.AutoLineSeize.onHookDialing parameter. Hot dialing sticky behavior can be configured to be different than normal new call sticky behavior. "Stickiness" refers to using the same line for a new call as the last-used line when a call has been put on hold.

3.1.8 From Version 2.0.3 to 2.0.3 B

3.1.8.1 Mandatory Changes

None.

3.1.8.2 Optional Changes

None.

3.1.9 From Version 2.0.2 to 2.0.3

3.1.9.1 Mandatory Changes

None.

3.1.9.2 Optional Changes

None.

3.1.10 From Version 2.0.1 to 2.0.2

3.1.10.1 Mandatory Changes

None.

3.1.10.2 Optional Changes

None.

3.1.11 From Version 2.0.0 to 2.0.1

3.1.11.1 Mandatory Changes

None.

3.1.11.2 Optional Changes

• Using template support in master configuration file

The master configuration file may contain the string "[MACADDRESS]". This will be replaced with the MAC address of the phone. For example, the file 00000000000.cfg may refer to [MACADDRESS]phone.cfg which will be replaced with something like 0004f2100137phone.cfg. This can make provisioning more efficient.

Adding Nortel MCP NAT traversal

The new parameters volpProt.SIP.pingInterval and reg.x.proxyRequire should be configured if this feature is needed.

Adding NAT keepalive

If NAT keepalive is required, the new parameter nat.keepalive.interval should be set to a non-zero value.

3.1.12 From Version 1.6.7 to 2.0.0

3.1.12.1 Mandatory Changes

Using the phone's menu to select call progress tones

This feature has been removed from the default configuration of the phone. In order to still use this feature, the old configuration parameters should be added to the sip.cfg file and a new parameter, feature.cpt.enabled, must be added and set to 1. Old configuration parameters are feature.10.name="cpt-settings", feature.10.enabled="1", and the entire localization – multilingual – language – callProgTones section and the entire localization – callProgTones section.

3.1.12.2 Optional Changes

Adding IP QoS support for DSCP (DiffServ)

Add the parameters qos.ip.rtp.dscp and qos.ip.callContol.dscp for DSCP. A valid value is either a number or string as follows

- 1) Any number from 0 to 63
- 2) FF
- 3) Any of AF11, AF12, AF13, AF21, AF22, AF23, AF31, AF32, AF33, AF41, AF42, AF43

The rules are:

- 1) When qos.ip.rtp.dscp has a valid value, then it overrides the following:
- i) qos.ip.rtp.min_delay
- ii) qos.ip.rtp.max_throughput
- iii) qos.ip.rtp.max_reliability
- iv) qos.ip.rtp.min_cost
- v) qos.ip.rtp.precedence
- 2) Similarly when qos.ip.callControl.dscp has a valid value, then it overrides qos.ip.callControl.min delay etc.

3.1.13 From Version 1.6.6 to 1.6.7

3.1.13.1 Mandatory Changes

Selecting "sticky" line seize behavior

To have the same line seize behavior as SIP 1.6.5, set call.stickyAutoLineSeize to 1 in sip.cfg.

3.1.13.2 Optional Changes

Overriding codec preferences received from far end

To allow the phone to override the list of codec preferences received by the phone, set volpProt.SDP.answer.useLocalPreferences to 1 in sip.cfg.

3.1.14 From Version 1.6.5 to 1.6.6

3.1.14.1 Mandatory Changes

None.

3.1.14.2 Optional Changes

 Sending re-INVITE to server during conference setup on BLA Set call.shared.exposeAutoHolds to 1 in sip.cfg

3.1.15 From Version 1.6.4 to 1.6.5

3.1.15.1 Mandatory Changes

None.

3.1.15.2 Optional Changes

• Getting SIP server address from DHCP

The SIP server address can be obtained from a DHCP server if the new parameters volpProt.server.dhcp.available, volpProt.server.dhcp.option and volpProt.server.dhcp.type are configured correctly.

Using configuration file values for SNTP parameters instead of DHCP values
 If the configuration file settings for the SNTP server address or GMT offset should be
 used instead of the values obtained from a DHCP server, set one or both of the new
 parameters tcplpApp.sntp.address.overrideDHCP and
 tcplpApp.sntp.gmtOffset.overrideDHCP to 1.

• Reducing the power requirements reported via CDP for a SoundPoint IP 601 A new flash parameter "EM Power" is available under the Network Configuration menu of SoundPoint IP 601 phones. If this is set to "Enabled" the phone will report power requirements of 12W which is sufficient to power three Expansion Modules. If the parameter is set to "Disabled" the phone will report power requirements of 5W and no Expansion Modules can be connected to the phone. By default this parameter will be set to "Enabled" when the phone is upgraded to 1.6.5. BootROM version 3.1.3 is required in order for the same power requirements to be reported at boot time. Please refer to Tech Bulletin TB14052 for details on upgrade/downgrade process with respect to this parameter.

3.1.16 From Version 1.6.3 to 1.6.4

3.1.16.1 Mandatory Changes

None.

3.1.16.2 Optional Changes

None.

3.1.17 From Version 1.6.2 to 1.6.3

3.1.17.1 Mandatory Changes

Dialog event package draft backwards compatibility
 If the old dialog event package draft behavior is desired (SDP is sent in dialog body), set the new volpProt.SIP.dialog.useSDP parameter in sip.cfg to 1.

3.1.17.2 Optional Changes

- Changing the destination of phone-specific override file uploads
 Use the new CONTACTS_DIRECTORY and OVERRIDES_DIRECTORY fields in 00000000000.cfg.
- Preventing IP address caller ID display when PSTN caller is unknown
 The "url-dialing" feature must be disabled in order for the IP address to be hidden.

3.1.18 From Version 1.6.1 to 1.6.2

3.1.18.1 Mandatory Changes

None

3.1.19 From Version 1.6.0 to 1.6.1

3.1.19.1 Mandatory Changes

Voice Configuration Parameters Updated
 Some parameters in the "voice" section of sip.cfg have been modified and this entire section is required when using SIP 1.6.1.

3.2 Outstanding Issues

The following issues will be fixed in a subsequent release.

Note: Polycom has switched to a different issue tracking system which has caused the reference numbers in these release notes to be different to earlier versions. When the issues are addressed the numbers in this release note can be used to track in which version the issue is addressed.

- 24398: No Layer 2 QoS support for signaling protocol (TCP)
 Workaround: The default QOS parameters will still be used for TCP signaling
 packets, and these may be specified in the sip.cfg configuration file. Layer3 QoS
 settings are supported.
- 24805: Cannot answer an incoming call while directory is being saved *Workaround:* None.
- 26615: Subnet mask forces all packets through gateway when not using DHCP and when using the wrong subnet mask for the network class in use, for example using 192.168.X.X addresses with a 255.255.0.0 subnet mask Workaround: Use the correct subnet mask.
- 26920: Centralized conference fails due to RTP port being slow to open in some cases

Workaround: None.

• 27469: Local Conferencing on IP4000 phones is disabled if G.729 is in the Codec preference list

Workaround: Disable G.729 as a Codec option on the phone by setting voice.codecPref.IP 4000.G729AB="""

• 28508: Phone crashes after receiving high call rate (4 unanswered calls every 18 seconds)

Workaround: Reduce the incoming call rate.

- 29344: HTTP Digest Authentication does not work on IIS
 Workaround: Use a different form of authentication, a different protocol or a different server
- 29946: Log files are not uploaded if an Apache 2.0.X boot server requires authentication

Workaround: Turn off authentication or use version 1.3.3X of the Apache server.

- 30086: **Boot servers running explicit FTPS are not supported** *Workaround:* Use implicit FTPS or HTTPS.
- 30371: Pattern generator for tones does not work well for the case of a single repeating chord

Workaround: Start the pattern with a short period of silence then the desired initial chord. Loop back to the desired initial chord instead of the initial silence.

30903: Packet Loss statistics 'jump' if calls are transferred.
 Workaround: If using the packet loss statistics for troubleshooting purposes make a
 note of the Packet Loss value after the transfer and apply a correction based on this
 to subsequent calculations.

 32476: IP601 does not work correctly when Presence feature is enabled with LCS server without using Roaming Buddies

Workaround: Enable roaming buddies by setting roaming_buddies.reg to the LCS registration number.

- 32611: **BLA line can not place and hold more than 10 calls** *Workaround:* For BLA lines ensure that call.callsPerLineKey is set to 10 or lower.
- 32816: Phone crashes on subsequent call if using NTLM and received transfer from non-NTLM phone

Workaround: Ensure that all phones involved in a transfer use NTLM, or do not use NTLM authentication

• 32994: SoundPoint IP 650 phone may have an incomplete display with only shades of grey after booting up

Workaround: Cycle power to the phone to make it boot again

- 33063: Active FTP mode is not supported for phone provisioning *Workaround:* Configure the ftp server for Passive FTP operation.
- 33445: LCS Presence and dialing from Buddy Lists does not work across 'Federations'

Workaround: To dial contacts across federations program a speed dial with the SIP URI of the contact. There is no workaround for watching 'Federated Buddy' status from the phone.

 33593: Shared line does not show remote active for the second incoming call if callsPerLineKey parameter is set to 1

Workaround: Set callsPerLineKey parameter to a value greater than 1.

• 34454: If microbrowser is enabled and refreshes are too frequent and pages contain large images, the phone may crash

Workaround: Do not refresh microbrowser too frequently in configuration settings or by rapidly pressing the Refresh softkey. Design the pages so that the content is within reasonable limits.

 34743: A phone may freeze when it receives a check-sync if the resources on the phone are heavily used by downloaded wave files or large or complex microbrowser pages

Workaround: Reduce the RAM disk size configured in sip.cfg (this will reduce the amount of space available for downloaded wave files and other resources) by setting ramdisk.nBlocks to 3072. Design web pages used by the microbrowser carefully.

• 36969: SoundStation IP 4000 phone does not display Japanese language properly.

Workaround: None.

• 37391: The Phone may fail to boot if the contact directory contains improper XML syntax.

Workaround: Ensure that the contact directory is in a proper XML format.

• 37449: The phone may re-boot when the user tries to end a local conference if the call server does not respond to the REFER message.

Workaround: Ensure that the server is configured to respond to the REFER that ends the conference.

- 37391: **Brief audio 'noise' due to SRTP encryption key change.** *Workaround:* To minimize the frequency of occurrence configure the sec.srtp.key.lifetime as long as possible.
- 37437: When SRTP is used with both Authentication and Encryption enabled on SoundPoint IP 301, 501, 600 and 601 platforms, and three-way conferencing is enabled the phone will re-boot when a local conference is attempted.
 Workaround: Disable local conferencing by setting sec.srtp.leg.allowLocalConf="0" (this is the default setting) or disable SRTP Authentication. See Technical Bulletin 25751 for details.
- 38279: If a 403 response is received by the phone when attempting to complete a call transfer in the proceeding state the phone may re-boot. Workaround: Set allowTransferOnProceeding="0" which prevents a transfer from occurring during the proceeding state.
- 39419: Maximum Backlight Intensity setting has very little effect on SoundPoint IP 560 phones.

Workaround: None.

• 39490: In some call scenarios the phone may not display the SRTP secure line icon even though the call is encrypted.

Workaround: None.

Note: The phone does not ever indicate that a call is encrypted when it is not.

 39630: Using SoundPoint IP 330/320 phone with LCS2005; Blocking a roaming buddy from the Privacy list also prevents the user from viewing the 'Blocked' buddy's status

Workaround: Do not block user's from viewing your status if you wish to view their's

4. Reference Documents

- Administrator Guide SoundPoint IP SIP Version 2.2.0
- Technical Bulletins 5844, 11572 35311, 35361 may be obtained from the Polycom web-site Support Knowledge-Base www.polycom.com/support/voip
- Technical Bulletin 25751 is available from the Polycom PRC.